

BI-NATIONAL PLANNING GROUP

THE FINAL REPORT

on

Canada and the United States (CANUS)

Enhanced Military Cooperation



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March 13, 2006

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CANADA-UNITED STATES
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March 13, 2006

To: Minister of Foreign Affairs, Canada
Secretary of State, United States of America

The Bi-National Planning Group (BPG) was established in December 2002 through an exchange of Diplomatic Notes on enhanced military cooperation between the Governments of Canada and the United States. The BPG's *Final Report on Canada and the United States (CANUS) Enhanced Military Cooperation* is attached.

The BPG's mandate covered a critical period in the evolving defense and security relationship of the United States and Canada, a time during which both countries responded to the new threat environment after the terrorist attacks of September 11, 2001. Over the course of its mandate, extended until May 2006, the BPG exceeded expectations. It conducted reviews of existing Canada-U.S. defense plans and military assistance protocols; drafted new bi-national contingency plans to respond to threats, attacks and other major emergencies in Canada or the U.S.; analyzed information sharing practices; designed and participated in exercises and joint training; and established coordination mechanisms with relevant Canadian and U.S. Federal departments and agencies.

The findings and recommendations contained in this Final Report provide great insight into key areas of Canada-United States military cooperation. The BPG's efforts are intended to be a catalyst in defining and strengthening future CANUS relationships. We recommend that its functions be moved to the appropriate strategic and operational levels of the Canadian and United States agencies responsible for the defense and security of our shared continent.

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Head of BPG

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Attachment:

Final Report on Canada and the United States (CANUS) Enhanced Military Cooperation

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EXECUTIVE SUMMARY

The terrorist attacks of 11 September 2001 changed the international defense and security environment forever. The immediate fallout from this event highlighted the need for enhanced cooperation between nations to protect their citizens and their economies. This need is critical for Canada and the United States, whose 5,525 mile¹ common border separates two culturally like-minded nations, whose economies are intertwined more closely than any other two nations in the world, and who have a long history of mutual support as friendly neighbors and allies.

In the aftermath of 9/11, the North American Aerospace Defense Command's (NORAD) mission was refocused,² and a Canada-United States Smart Border Agreement was signed within three months. In contrast to this initial cooperative bi-national response, each country has independently formed new and similar national defense and security organizations as part of their national strategies. It is imperative that these new organizations (and other existing ones) improve their coordination and communication with each other to reduce seams and gaps between them. The Bi-National Planning Group (BPG) believes that this would best be done through a Canada – United States agreement.

From their national perspectives, both Canada and the United States have articulated the need for enhanced security cooperation in their national strategy documents, as well as in the Security and Prosperity Partnership signed by Canada, the United States and Mexico last year. However, an overarching vision for continental defense and security organizations is missing.

The Bi-National Planning Group encourages the development of an agreed Canada – U.S. vision statement, from the Governments of Canada and the United States, to provide direction and authority for enhanced coordination and cooperation among our foreign policy, defense and security

organizations. The goal should be to achieve the level (although not necessarily the form) of cooperation that now exists in NORAD in all other domains. This vision should be implemented by a Canada – United States “Comprehensive Defense and Security Agreement,”³ with a continental approach to CANUS defense and security while maintaining an open invitation to participation by other countries. The Agreement would provide guidance, direction, and authority for:

- Development of deliberate plans for the joint and combined defense and security of North America⁴ as well as bi-national civil support (see Chapter 2)
- Conduct of seamless bi-national information sharing (see Chapter 3)
- Development of command, control, communications and computer architectures to support information sharing (see Chapter 4)
- Conduct of joint and combined training and exercises (see Chapter 5)
- Development of coordination mechanisms, including agreements among the military stakeholders and the homeland security and foreign policy communities (see Chapter 6)

The upcoming NORAD Agreement renewal (including a *potential* expansion of its mandate into the maritime domain) is an important step towards enhancing the defense and security of our continent. To continue this momentum a “Comprehensive Defense and Security Agreement” is the next logical step, as it would bring unity of effort⁵ and direction to each of the defense, security and foreign policy organizations, including NORAD. A new agreement would shift paradigms and outdated cultures, resulting in newer, more effective plans, policies and procedures. As a result, the people of Canada and the United States would become less vulnerable to both man-made and natural threats.

NOTES:

¹ The Canada-United States International Boundary Commission identifies the total mileage as 5,525 miles or 8,891 kilometers. Obtained on 4 January 2006, from www.internationalboundarycommission.org.

² Per Canadian *National Security Policy*, dated April 2004, “Since September 11, NORAD has adapted to the new threat environment by increasing its operational readiness and by addressing threats within and outside North America.” (NSP, Page 36).

³ Evolving from the long-standing Canada-United States relationship, the continental approach used throughout this document refers initially to the defense and security of the north half of the Western Hemisphere, and maintains an open invitation to participation by other countries. From a BPG perspective the envisioned continental approach throughout this report does not violate sovereignty or impair the national interests of any country, nor does it preclude bi-lateral agreements.

⁴ North America is used here as per the BPG Terms of Reference. It is intended to focus on the upper half of North America (Canada and the United States), while leaving an open invitation to participate to other countries with vested interest in defending or securing the continent (See App 1, para 5.a.).

⁵ This key recommendation supports the intent of the *Quadrennial Defense Review Report* and Canada’s *International Policy Statement*, The QDR “recommends the creation of National Security Planning Guidance to direct the development of both military and non-military plans and institutional capabilities. The planning guidance would set priorities and clarify national security roles and responsibilities to reduce capability gaps and eliminate redundancies. It would help Federal Departments and Agencies better align their strategy, budget and planning functions with national objectives. Stronger linkages among planners in the Military Departments, the Combatant Commands and the Joint Staff, with the Office of the Secretary of Defense and with other Departments should ensure that operations better reflect the President’s National Security Strategy and country’s policy goals” (QDR, page 85). It also supports Canada’s *International Policy Statement: Defence* aim to, “improve coordination with other government departments and interoperability with allied forces, particularly the United States, through smart investments in evolving technology and doctrinal concepts, training opportunities, and exchange and liaison programs” (IPS-Defence, page 12).

PREFACE

BACKGROUND

The Bi-National Planning Group (BPG) was created by Foreign Affairs Canada and the United States Department of State in December 2002 via the *Enhanced Military Cooperation Agreement*. The Agreement directed the BPG to enhance bi-national military planning, surveillance, and support to civil authorities. The Canadian Chief of the Defence Staff and the U.S. Chairman of the Joint Chiefs of Staff supplemented and clarified the Agreement by tasking the BPG in the Terms of Reference (TOR) tasks quoted in the following bullets:

- **TOR Task #1:** Conduct reviews of all existing Canada-U.S. defense plans (to include the Basic Security Document and the [draft] Combined Defense Plan) and military assistance protocols with a view toward improving North American land and maritime defense as well as potential new mechanisms for improving military support to civil agencies in times of major emergencies in both Canada and the United States; [addressed in Chapter 2]
- **TOR Task #2:** Prepare bi-national contingency plans to respond to threats, attacks, and other major emergencies in Canada or the United States, in accordance with the U.S. Joint Operation Planning and Execution System (JOPES) and the Canadian Forces Operational Planning Process (CF OPP); [addressed in Chapter 2]
- **TOR Task #3:** Maintain awareness of emerging situations through maritime surveillance activities. Share intelligence and operational information in accordance with national laws, policies and directives under the auspices of intelligence arrangements between the Department of Defense and NDHQ. This shall include assessment of maritime threats, incidents and emergencies to advise and/or warn Governments. [addressed in Chapters 3 and 4]
 - The BPG will focus its maritime assessments and warnings to those threats (real or perceived) that could affect both Canada and the United States. This is not meant to limit the flow of information between the two countries under existing or future agreements,
 - The BPG shall develop mechanisms and protocols to advise and/ or warn both Governments;
- **TOR Task #4:** Design and participate in exercises; [addressed in Chapter 5]
- **TOR Task #5:** Plan and participate in joint training programs; [addressed in Chapter 5]
- **TOR Task #6:** Validate plans prior to approval; [addressed in Chapter 5]
- **TOR Task #7:** Establish appropriate coordination mechanisms with relevant Canadian and U.S. federal agencies. BPG interactions with U.S. civilian agencies shall be coordinated through the Office of the Secretary of Defense via the Joint Staff Strategic Plans and Policy Directorate (J-5). Interaction with Canadian civilian agencies shall be coordinated through the Deputy Chief of the Defence Staff. [addressed in Chapters 6 and 7]

ORGANIZATION OF THIS REPORT

This report consists of seven chapters. The introductory chapter answers “why” our nations are seeking closer ties in homeland defense and security. It acknowledges each nation’s sovereignty and provides an overview of the diplomatic, informational, military and economic overlap between Canada and the United States. In addition, it provides insight to key political documents such as the *Security and Prosperity Partnership of North America*, the *Canadian National Security Policy* and the *U.S. National Security Strategy*. The chapter concludes with an overview of the CANUS strategic planning system to provide the reader with insight as to the bi-national political and military interface.

Chapters 2 through 7 focus upon the tasks mandated by the BPG Terms of Reference. Each chapter includes four sections:

- I. Introduction
- II. Bottom Line Up Front
- III. Recommendations
- IV. Possible Impediments to Change

For the reader who wants to better understand how we came to our conclusions, more detailed information on each topic is in the “background and discussion” for each topic, which is located in the applicable appendices.

During the development of the *BPG Interim Report on Canada and the United States (CANUS) Enhanced Military Cooperation* (13 Oct 2004), we focused principally on problem identification and the gathering of facts to better understand the current CANUS situation. In contrast, this report takes a continental approach to defense and security with recommendations for key decision makers.

Acknowledgment

We thank Lieutenant General Eric Findley and Lieutenant General Joseph Inge, the Head and Deputy Head of the BPG, for their tremendous encouragement and support. In addition, we thank the NORAD-U.S. Northern Command Executive Steering Committee for their wise guidance. Finally, we wish to express our sincere appreciation to the former directors and members of the Bi-National Planning Group for their tireless efforts and their outstanding work. We couldn’t have done it without any of these key stakeholders. On behalf of the collective members of the Bi-National Planning Group, we also offer our genuine appreciation to Foreign Affairs Canada, the U.S. Department of State, the Canadian Department of National Defence, and the U.S. Department of Defense for the incredible opportunity to do this important work in service to our nations.



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CHAPTER 1. INTRODUCTION

PART I. OVERVIEW

This report provides feedback to senior leadership within the Privy Council Office, the National Security Council, Foreign Affairs Canada, the United States Department of State, the Canadian Department of National Defence and the United States Department of Defense. In addition, many think-tanks and academic institutions have expressed interest in our findings on enhancing military cooperation between Canada and the United States. With this diverse audience, the Report has been written to address the varying levels of familiarity with military lexicon or doctrinal terminology in mind.

In addition, it should be noted that the Canadian and United States governments, and the organizations of Canada Command and U.S. Northern Command, are not symmetrical. For instance, Canada Command is organized regionally, whereas U.S. Northern Command is organized with functional components and Joint Task Forces. Where differences exist in organizational constructs or terminology, this report explains them.

To set the stage for the remaining chapters, this introductory chapter explains why our nations are seeking closer ties in homeland defense and security. In so doing, it is focused on the political and military interfaces at the strategic level.

Part 2 of this chapter is focused upon our respective instruments of national power. The *Canadian Forces Operations* and the *U.S. Joint Warfare of the Armed Forces* focus on analyzing relationships among countries using the familiar instruments of national power, which include diplomatic, informational, military and economic instruments. These instruments of national power are used in this

chapter to fully describe the current relationship between Canada and the United States.

By discussing the political-military interface, this part provides an overview of key strategic documents such as the Canadian *National Security Policy* (NSP), the U.S. *National Security Strategy* (NSS) and the *Security and Prosperity Partnership of North America* (SPP). This description of strategic guidance is intended to provide readers on both sides of the border with a greater understanding of each other's perspectives. It also provides the background needed to understand the Bi-National Planning Group's (BPG) recommendation for a continental¹ approach to defense and security where combined operations are systematically and routinely conducted.

Part 3 presents an overview of the *possible* impediments to enhanced military cooperation. While this first chapter provides an overview, the remaining chapters will provide greater detail on impediments from a functional perspective.

In summary, this report will describe activities, progress and accomplishments of the BPG in carrying out tasks mandated by its Terms of Reference (TOR). It complements the *Interim Report on CANUS Enhanced Military Cooperation*,² by presenting recommendations for enhancing our partnership in the defense and security of Canada and the United States (CANUS).³ The continental approach described in this Report refers to the CANUS defense and security of the North half of the Western Hemisphere, while maintaining an invitation to participation by other countries as deemed appropriate by either nation and not to deter from the existing strong CANUS relationship. In addition, the approach is based on cooperation among defense and security organizations, not integration.

Finally, as part of this continental approach, the sovereignty of both countries will be respected, while keeping in mind agreeing to work together is as much an exercise of sovereignty as going it alone. The BPG recognizes these are ambitious goals given organizational structure realities, and also recognizes there are issues to address, such as policy and legal restrictions on information sharing. However, pursuing this approach will result in greater safety for the people of both nations.

PART 2. CANADA-U.S. INSTRUMENTS OF NATIONAL POWER

Homeland Defense⁴ and Homeland Security⁵ are top priorities for the governments of Canada and the United States.⁶ For purposes of this Report, our definitions of Homeland Defense and Homeland Security are based on U.S. definitions. The BPG is defining Homeland Defense as protection of Canadian or United States sovereignty, territory, domestic population, and critical infrastructure against external threats and aggression or other threats as directed by the President and/or Prime Minister. Homeland Security is defined as using a concerted national effort to prevent attacks within the United States and/or Canada, reduce vulnerability to terrorism and minimize the damage and recover from attacks that could occur.

For decades, Canada and the United States have been partners in diplomacy and in the defense of North America, cooperating within the framework of the *Ogdensburg Declaration*, the *North Atlantic Treaty*, the *North American Aerospace Defense (NORAD) Agreement*, the *Charter of the Organization of American States*, and most recently the *Security and Prosperity Partnership of North America*. Thus, our nations have a long history of cooperation resulting in unparalleled economic prosperity, freedom and the safety and well being of our people.

As discussed in *Canadian Forces Operations* and the *U.S. Joint Warfare of the Armed Forces*, the four instruments of national power include: economic, diplomatic, informational and military.⁷ Success can only be achieved through the orchestration of all Canadian and U.S. elements of national power.⁸ Therefore this section provides greater clarity to our rationale for a continental approach to defense and security.

- *Economic*. The economic instrument of power refers to a strong domestic and international economy, with free access to global markets, resulting in the improved general welfare of our people. It serves as the guarantor of the resources necessary to our strong national defenses.
- *Diplomatic*. The diplomatic instrument of national power is the principal instrument of engagement between Canada and the United States, as well as the principal instrument for Canadian or U.S. engagement with other states and foreign groups.
- *Informational*. The informational instrument of national power is diffuse and complex, as most information is exchanged freely across our shared borders, even when that information may be undesirable.⁹
- *Military*. The military instrument of power is used, typically as a last resort, in support of the national interest when diplomatic, informational or economic instruments of power have failed. The range of military operations spans from civil support,¹⁰ consequence management,¹¹ peacekeeping operations and low intensity conflict to major combat operations. The Canadian Forces and the U.S. military train (in a number of cases together) for similar operations across the full range of defense and security missions.¹²

These four instruments are described in greater detail below, because the synchronization of all instruments of national power is required to ensure the successful execution of our defense and security missions.¹³ When the instruments are used in concert with each other and/or in cooperation with other nations, then the result is an exponentially stronger, faster and more effective means to address critical events.

Therefore, Canada and the United States must strengthen existing, and develop new, mechanisms that will enable us to plan for, and practice using, instruments of national power in concert with one another. Both nations will benefit from the synergies that arise from doing so.¹⁴

The people of Canada and the United States share the fundamental belief that competition and open capital markets foster innovation, productivity and economic growth—all of which are essential for improving the living standards of our citizens over time.¹⁵ Canada and the United States share a unique partnership due to the similarities or overlap in instruments of national power between both nations.¹⁶ Our unique relationship, which has evolved over the past century, is due to the fact that we share a common economic, defense and security space.

A. Economic Instrument of Power

Canada and the United States have separate and distinct national centers of gravity. However, from a *bi-national* perspective, the North American economy and related critical infrastructure is a shared center of gravity that must be defended to preserve our ways of life.¹⁷ This continental view of defense and security issues became increasingly important after Canada, the United States and Mexico implemented the *North American Free Trade Agreement* (NAFTA).

Most Canadians and Americans are aware that NAFTA eliminated tariffs and removed many other barriers, such as import licenses.¹⁸ This resulted in increased trade that averages \$1.4 billion (US) per day between Canada and the United States.¹⁹ U.S. exports to Canada became three times greater than exports to Japan, larger than the total U.S. exports to the 15-nation European Union and larger than U.S. trade with *all* the countries in Latin America.²⁰ Exports from Canada to the United States doubled as a percentage of gross domestic products and Canada is now the leading export destination for 39 out of the 50 states.²¹ Annual trade increased from \$243 billion (US) in 1994 to \$410 billion (US) prior to the 11 September 2001 (9/11) terrorist attacks.²²

Security measures and concerns about further terrorist attacks resulted in a short-term recession that impacted on our economies (see Figure 1).²³ This short-term decline in trade started in 2001 and continued through 2003, with substantial recovery in 2005. It is clear that an attack on one nation affects not just the defense and security of that nation, but also the economic well-being of both nations.²⁴ Closing the shared border after 9/11 had dramatic consequences for both of our economies. We must therefore plan to ensure this does not happen again. Specific examples of Canadian and U.S. economic interdependency follow:

- Oil. The United States is the world's largest net oil importer and Canada sends over 99% of its crude oil exports to the U.S. making Canada the U.S.'s largest source of imported oil (see Figure 2).²⁵
- Natural Gas. Canada sends over 99% of its natural gas exports to the U.S.²⁶
- Trade. 37,000 trucks per day cross the border (both ways) in support of trade.
- Coal. Canada imported 22.2 million short tons of thermal coal in 2003 for electricity generation, of which 87% came from the United States.

- Uranium. 100% of U.S. imports of uranium come from Canada.
- Electricity. Canadian exports to the U.S. have decreased while imports have increased because investment in Canadian generating capacity has not matched increased domestic demand.
- Manufactured Goods. A significant amount of U.S. exports to Canada consist of manufactured goods such as motor vehicles, electrical equipment and other manufactured articles.²⁷

The increasing integration of the Canadian and United States (as well as the Mexican) economies stands as a model of mutually beneficial trade. While maintaining distinct monetary, fiscal, economic and social policies and practices that are tailored to each nation's particular needs and economic structure, both nations have managed to forge an open marketplace where goods, services and capital can move freely.²⁹ To preserve that economic freedom, our defense and security initiatives should be planned and coordinated continentally. Planning is further discussed in Chapter 2.

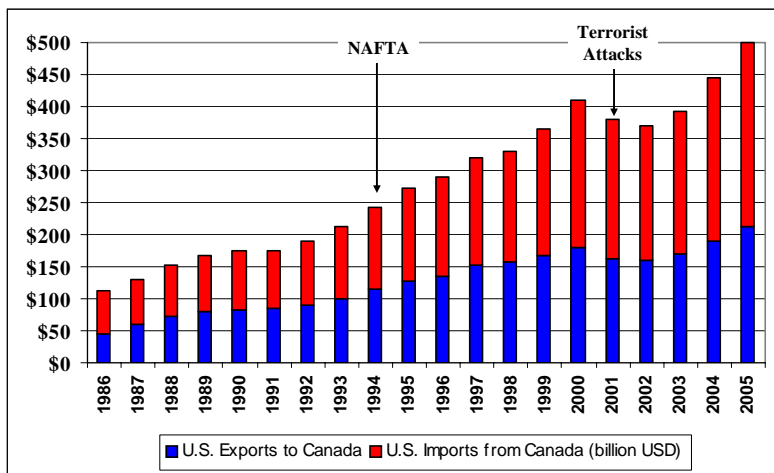


FIGURE 1: TRADE BETWEEN CANADA AND THE UNITED STATES

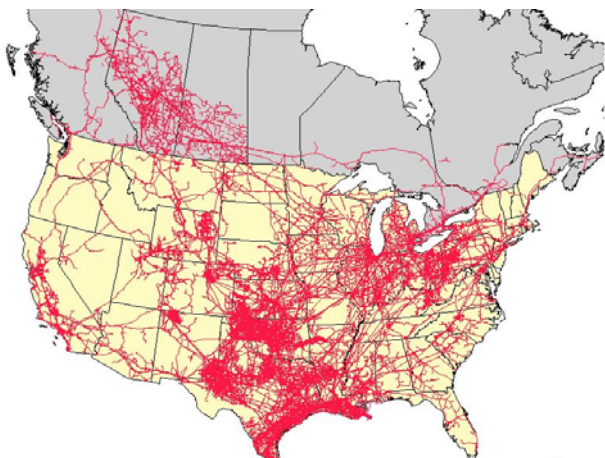


FIGURE 2: CANADA-U.S. PIPELINE COVERAGE²⁸

B. Informational Instrument of Power

Official information exchanges between Canada and the United States became stove-piped or linear during the Cold War and the decades that followed. As depicted in Figure 3, linear relationships developed between similar organizations such as Foreign Affairs Canada (FAC) and the U.S. Department of State (DOS) or the Canadian Department of National Defence (DND) and the U.S. Department of Defense (DOD); and to an extent have continued between Public Safety and Emergency Preparedness Canada (PSEPC) and the Department of Homeland Security (DHS).

This practice of linear information sharing also existed within defense establishments, between Canadian and U.S. maritime, land, air, space and cyber environments (or services) resulting in stove-piped information flows that did not cross among the different domains in a systemic fashion (see Figure 3). Issues or deficiencies due to the stove-piped sharing of information have been highlighted in numerous reports,³⁰ including the 9/11 Commission Report that stated:

“Current security requirements nurture over-classification and excessive compartmentalization of information among

agencies. Each agency’s incentive structure opposes sharing, with risks (criminal, civil, and internal administrative sanctions) but few rewards for sharing information. No one has to pay the long-term costs of over-classifying information, though these costs—even in the literal financial terms—are substantial. There are no punishments for *not* sharing information [nor rewards for the appropriate sharing]. Agencies uphold a ‘need-to-know’ culture of information protection rather than promoting a ‘need-to-share’ culture of integration.”³¹

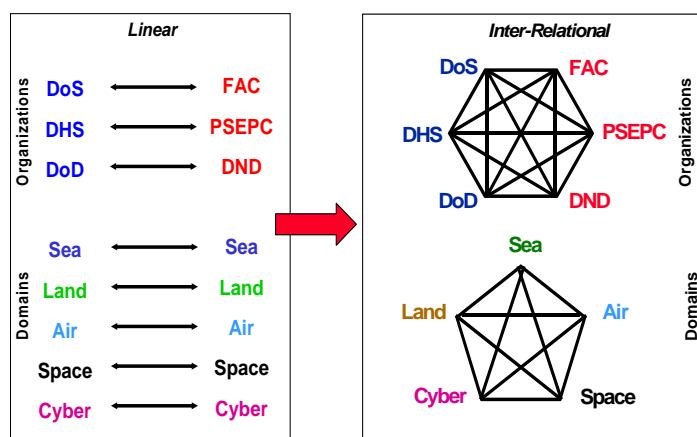


FIGURE 3: LINEAR AND INTER-RELATIONAL INFORMATION SHARING

If Canada and the United States continue to perpetuate these linear relationships, then another 9/11-type attack may be very difficult to prevent.³² Therefore, we need to evolve towards the inter-relational sharing of information as shown on the right side of Figure 3. The BPG agrees with, and in turn expanded, the information sharing recommendation from the 9/11 Commission Report to one with a bi-national focus:

“Canadian and U.S. information sharing procedures should provide incentives for sharing among CANUS agencies to restore a better balance between security and shared knowledge.”³³

This would need to be done consistent with nations’ policies, domestic laws and applicable international law. Analysis on information and/or intelligence sharing as related to enhancing CANUS military cooperation is covered in Chapter 3, and the enabling architecture is addressed in Chapter 4.

C. Diplomatic Instrument of Power

Diplomatic relationships between Canada and the United States have grown stronger during the past century. The modern era in the political/military relationship between the two countries began due to concerns about an Axis invasion of North America, which drew Canada and the United States closer together during the late 1930s. The joint statement of Prime Minister Mackenzie-King and President Roosevelt, known as the *Ogdensburg Declaration* (1940), marked this. It acknowledged the indivisible nature of continental security, pledged mutual assistance in the event of hostilities and formally established CANUS defense cooperation.³⁴ It also established the Permanent Joint Board on Defense. The intent of the *Ogdensburg Declaration* was later reinforced and expanded upon through the issuance of a joint statement by the Canadian Prime Minister and U.S. President in 1947,³⁵ the subsequent entry of both nations into the *North Atlantic Treaty* (1949), and the revolutionary *NORAD Agreement* (1958), which implemented air defense from a continental perspective. The NORAD Agreement has been renewed regularly since 1958, reaffirming our partnership in defense.

More recently, a historic meeting occurred at Waco, Texas, on 23 March 2005, whereby the elected leaders of Canada, Mexico and the United States jointly announced the *Security and Prosperity Partnership of North America*.³⁶ During this tri-lateral meeting, all three North American leaders described the security and prosperity of our nations as “mutually

dependent and complementary" and explained the impetus for this new initiative. They observed that over the past decade, our three nations have taken important steps to expand economic opportunity for our people and create the most vibrant and dynamic trade relationship in the world. In addition, as part of their efforts to protect North America from external threats, prevent and respond to threats within North America and streamline legitimate cross-border trade and travel, the three nations' leaders committed to:

- Implement common border-security strategies,
- Enhance infrastructure protection,
- Implement a common approach to emergency response,
- Implement improvements to aviation and maritime security,
- Enhance intelligence partnerships,
- Combat transnational threats, and
- Implement a border-facilitation strategy.

Since 11 September 2001, these three leaders have taken significant new steps to address the threat of terrorism, stating "in a rapidly changing world, we must develop new avenues of cooperation that will make our open societies safer and more secure, our businesses more competitive and our economies more resilient."³⁷ They indicated that this new North American partnership would work to achieve these ends and "is committed to reach the highest results to advance the security and well-being of our people."³⁸

Just as the *Ogdensburg Declaration* did in 1940, this joint statement on the *Security and Prosperity Partnership of North America* (SPP) outlines the intent of our national leaders to protect our continent in the face of adversity. The SPP complements the foci of the Canadian *National Security Policy* (NSP), the United States' *National Security Strategy* (NSS) and the

U.S. *National Strategy for Homeland Security* (NSHS).

The Canadian NSP focuses on addressing these three core national security interests: protecting Canada and Canadians at home and abroad; ensuring Canada is not a base for threats to our allies; and contributing to international security.

The six key strategic areas in the Canadian NSP focus on partnering with the United States and other partners in transportation security, border security, international security, intelligence, emergency planning and management and public health.

Similarly, the United States' NSS outlines the primary goal of creating a world of democratic, well-governed states that can meet the need of their citizens and conduct themselves responsibly in the international system. This primary goal is supported by essential tasks that include strengthening alliances, preventing our enemies from threatening the United States, its allies and friends, and working with others (such as Canada) to defuse regional conflicts, thereby providing security for the American people.³⁹

In addition, the United States NSHS complements the NSS by providing a comprehensive framework for organizing the efforts of federal, state, local and private organizations whose primary functions are often unrelated to national security.⁴⁰

Although threats of conventional conflicts will continue, the asymmetric threat to Canada and the United States has never been greater.⁴¹ The 9/11 attacks changed our perceptions of the threat, as well as the enemy perception of "Fortress North America"⁴² in such a way that superior information and intelligence sharing have become essential to the viability of our economic infrastructure, as well as the safety

and survival of our nations. A review of these documents reveals significant overlap between the Canadian NSP and U.S. NSS and NSHS goals, which provide guidance toward the implementation of these overall strategies.

The BPG reviewed these national strategies and goals to ascertain where the Canadian Forces and the U.S. military could achieve synergy between their efforts. The BPG analysis found that the interconnectivity among four instruments of national power promotes reinforcement between the Canadian NSP, the United States' NSS and the *National Strategy for Homeland Security*. This review showed that Canada and the United States must continue to act as partners; indeed, that the partnership must be expanded, to shape the future of North American defense and security, using all of the instruments of diplomatic, economic, informational and military power.

For a better understanding of the interaction between our nations, one must view the military instrument of national power using a "systems approach" to enhanced bi-national cooperation and planning, which is addressed in the next section and is shown in Figure 4.

D. Military Instrument of Power - A Systems Approach

The United States and Canada have a long history of defense and security cooperation, but the approach by which they have achieved results has not been codified into a systematic and/or doctrinal process.⁴³ This section is important because it identifies the political and military interfaces in both nations.

While our military readers may be familiar with the Canadian Forces Operational Planning Process (CF OPP) or the U.S. Joint Operation Planning and Execution System (JOPES), this section provides readers from both nations familiarity for a common understanding. It also

describes the draft CANUS Strategic Planning System⁴⁴ currently in use (see Figure 4), which is a continuous process, with revisions needed every two years or more often, when key events like the 9/11 attacks dictate as explained below:

- 1) National Interests and Values. Represented by the "clouds" at the top of Figure 4, the interests and values of Canada and the United States are more similar than they are different.⁴⁵ Strong majorities in both countries view the other as a friend and ally of their country,⁴⁶ and the people of both countries value freedom in their political and economic decisions. Canada is a country of alliances and multi-lateralism, whereas the U.S. prefers alliances and coalitions, but must also conduct unilateral operations as well.⁴⁷ Although Canada and the United States share similar interests, values and goals, each may employ different approaches.
- 2) External Environment. The external environment that impacts upon any nation includes economic forces, social forces, technological forces and external threats. Our political leaders cannot ignore the macro-economic impacts upon our nations, which include the trade among Canada, the United States and Mexico, as well as with other countries. The social environment between Canada and the U.S. is seldom a source of friction since we have fairly homogeneous societies with similar education levels and standards of living. Technology influences both of our nations in a positive manner and, to a large extent, it is technological development and the integration of our critical infrastructures (such as telecommunications and/or electricity) that binds our nations closer together. Symmetric and asymmetric threats are also part of the external environment, which may influence the Government of

Canada (GOC) and the United States Government (USG).

3) The Canadian Planning System is represented in red in Figure 4. Within Canada, the Prime Minister and his senior advisors developed the *National Security Policy* (NSP), which provides overarching guidance to key stakeholders in the Canadian defense and security environment. In addition, the Prime Minister and Cabinet developed an *International Policy Statement* (IPS), which provides further clarity of goals and objectives in numerous areas, including defense. The Chief of the Defence Staff (CDS) uses the NSP and IPS defense guidance to refine his vision, establish goals and objectives for Canadian Forces and identify applicable Canadian unilateral operations plans needed to support the Canadian defence and security interests.

4) The United States Planning System is represented in blue in Figure 4. The United States President, with the assistance of his National Security Council, develops a National Security Strategy (NSS), which provides strategic direction for the nation on security issues. (Figure 4). The President, as Commander in Chief, issues the Unified Command Plan (UCP), which assigns missions and responsibilities to the combatant commanders. The President approves the Contingency Planning Guidance (CPG), which provides guidance on the preparation and review of contingency plans. The Secretary of Defense (SECDEF) then develops a National Defense Strategy (NDS), which supports the President's NSS and provides direction for the Chairman of the Joint Chiefs of Staff's (CJCS) National Military Strategy (NMS). The NMS provides strategic direction for the Armed Forces in supporting the NSS and NDS. The SecDef provides further guidance to combatant commanders in the *Forces for Unified*

Commands Memorandum and the *Security Cooperation Guidance*. In addition, the CJCS issues planning guidance to combatant commanders⁴⁸ through the *Joint Strategic Capabilities Plan* (JSCP). The combatant commanders use the guidance from these documents to create plans that support U.S. defense and security interests worldwide. These plans typically form the bridge between the political intent and strategic and operational military goals.

5) The CANUS Strategic Planning System is represented in red and blue in Figure 4. Planning for continental defense has a long history. It began in 1940 with the Permanent Joint Board on Defense. It was expanded in 1946 with the creation of the Military Cooperation Committee. The CANUS Strategic Planning System is not codified in a publication, but has been practiced by NORAD for almost fifty years. Treaties and agreements form the basis of interaction between our sovereign countries. The North Atlantic Treaty provides the over-arching legal authority for the conduct of CANUS military operations. The North American Aerospace Defense Agreement provides authority for conduct of aerospace warning and control for Canada and the United States. The CANUS Basic Defense Document (BDD) (formerly named the Basic Security Document) then translates our political leaders' intent into a bi-national military-to-military document, defining common goals and objectives for the defense and security of North America. Based upon guidance in the BDD, operational military commanders create plans to defend our countries and/or provide civil support. Canadian and U.S. organizations then conduct joint and combined training and exercises to rehearse plans using mission essential tasks developed from the Canadian Joint Task List (CJTL) and/or the U.S. Universal Joint Task List (UJTL).

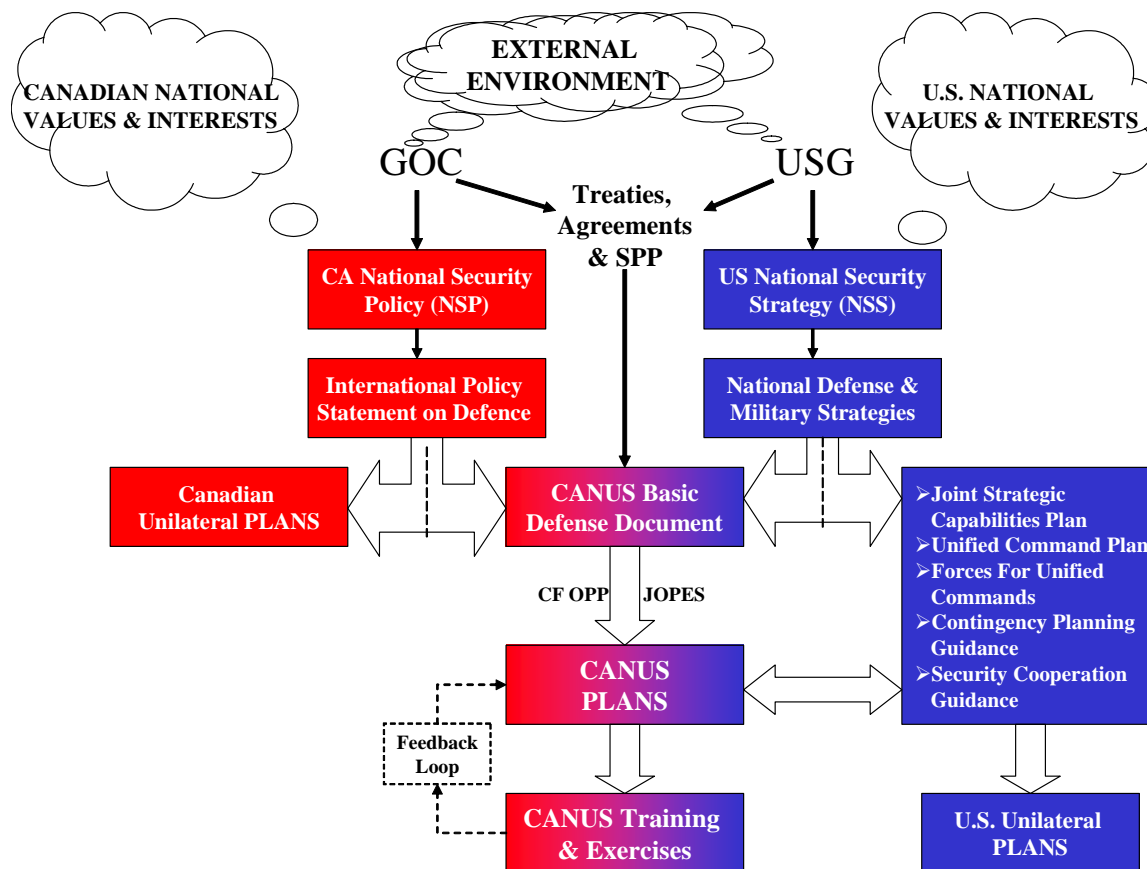


FIGURE 4: CANUS STRATEGIC PLANNING SYSTEM

Feedback on lessons learned facilitates continuous change and reassessment for the revision of deliberate plans.⁴⁹ (Further discussions of CANUS plans and agreements are in Chapter 2 and Chapter 6 respectively).

PART 3. POSSIBLE IMPEDIMENTS TO ENHANCED MILITARY COOPERATION

After the 9/11 attacks, the border was closed for a lengthy period, resulting in a significant negative impact upon our economies. Shortly thereafter, our senior leaders determined that we needed to change the way we were doing business in homeland defense and homeland security. Therefore, the following chapters

provide recommendations for organizational changes that will enhance the defense and security of North America.⁵⁰

As most readers appreciate, human nature resists organizational change due to the uncertainty that it creates. In the following chapters of this report, we identify potential impediments in three key areas that are described below: political, cultural and structural. They are defined in this section to ensure commonality of meaning and understanding by readers on both sides of the border. Impediments are then discussed in each chapter, to provide specific feedback about potential impediments identified in each functional area.

A. POLITICAL

From a diplomatic and political perspective, organizational change is grounded in the “interests” of numerous stakeholders, both internal and external to our defense departments. Whether in Canada or the United States, the political aspects of drawing the two nations into an enhanced military cooperation relationship could have significant political ramifications. If a political decision is made to cooperate fully in specific domains (air, land, maritime and perhaps cyber), resistance could potentially come from the affected organizations or from groups opposed for political reasons ranging from sovereignty to environmental concerns. Political friction within countries may also spill over to diplomatic friction among countries, impacting upon the previously discussed instruments of national power.

During the SPP meeting in 2005, all three North American leaders described the security and prosperity of our nations as “mutually dependent and complementary.”⁵¹ This evidenced the intent of our national leaders to move towards a continental approach to defense and security.⁵² While progress is being made, this political intent has not yet been fully translated into measurable initiatives among NORAD, Canada Command and U.S. Northern Command. Many of the recommendations within this report provide intermediate objectives toward that end state.

B. CULTURAL

Another way of thinking about organizational change is in terms of culture: changing norms, values, mental models, schema and assumptions about the organizations and the defense or security environment in which they operate. Fundamentally, cultural change is focused

not only on people’s behaviors and how they perform their missions, but also on how they think about their missions, goals and objectives. At the federal level, six principal organizations have responsibility for homeland defense and homeland security in Canada and the United States. The U.S. Federal Bureau of Investigation (FBI), which is part of the Department of Justice, and NORAD both existed prior to 9/11. The FBI is an American organization; but NORAD is a bi-national command, with both Americans and Canadians on its staff and throughout its chain of command.

In contrast, four new organizations were created *after* the 9/11 attacks: Public Safety and Emergency Preparedness Canada (PSEPC), the U.S. Department of Homeland Security (DHS), Canada Command and U.S. Northern Command. These four new organizations therefore have the opportunity to create new organizational cultures that support the kinds of behavior needed to combat terrorism. The difficulties that these new organizations have experienced in varying degree in establishing such new cultures illustrate the problem of cultural change. These latter four organizations were created as separate and distinct entities, with their own cultures. Since it has become increasingly difficult to separate defense and security, there is a need to create linking mechanisms among all six entities. These linking mechanisms must not only be effective and efficient, but must also be supportive of the organizational changes needed to counter symmetric and asymmetric threats. As an example, prior to 9/11, employees within one federal agency might have been reprimanded for sharing information with employees in a different agency. After 9/11, numerous commissions and studies recognized the absolute necessity to share information across agencies, borders and domains.⁵³ However, the BPG also

recognizes that this sharing must take place in an environment of policy and law on both sides of the border that may restrict access and create challenges in achieving a desired outcome. These challenges must not stand in the way of improving the culture and trust associated with information sharing and ultimately the protection of our people.

As most military readers know, deliberate planning is a cultural norm that exists within both of our militaries. It is shared between Canada and the U.S. within the organizational design of NORAD. The NORAD organization has its own very unique organizational culture that promotes bi-national enhanced military cooperation. Working side-by-side, civilian and military members of the NORAD organization have produced deliberate plans (see Chapter 2), produced actionable information and intelligence (see Chapter 3), developed a strategic level C4 architecture (see Chapter 4) and has had a robust training and exercise plan for over 47 years (see Chapter 5). The NORAD organizational culture could be described as ‘cooperating for the greater good.’

C. STRUCTURAL

Structural or strategic design concepts are described within Chapter 7. Structural choices begin with strategic grouping, which is the differentiation of clusters of activities, positions and individuals into work units. These work units are then linked together to ensure that information and other resources flow smoothly among all units. Within this report, we discuss “seams and gaps” between the national boundaries; the air, maritime, land and cyber domains; and separate and distinct organizations.⁵⁴ This reality creates the need for linkages⁵⁵ across these seams or gaps. Whichever strategic design is chosen by our Governments (as discussed in Chapter

7), there will be an ongoing need to assess, evaluate and create additional coordination mechanisms (information systems, memoranda, etc.) to ensure our defense and security organizations are optimally aligned for success and have the resources and incentives to carry out their mission essential tasks.

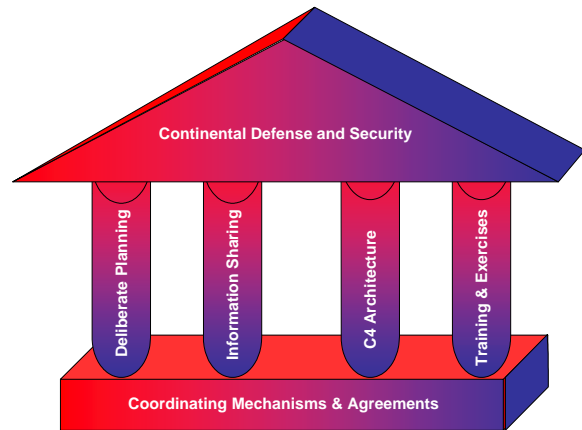


FIGURE 5: CONTINENTAL DEFENSE AND SECURITY

Symbolically, the continental defense and security approach is a “roof” that protects Canada and the United States (see Figure 5). The roof is supported by four pillars. The first pillar of enhanced CANUS cooperation focuses on deliberate planning, which enables future operations between Canadian and U.S. forces. The second pillar emphasizes information sharing between Canada and the United States, which has been emphasized in numerous commissions as the essential element in preventing symmetric and asymmetric attacks.⁵⁶ The third pillar, C4 architecture, is the enabler of information sharing. The fourth pillar includes training and exercises that are conducted among all defense and security organizations. As illustrated in Figure 5, these four pillars are supported by the foundation or base-coordinating mechanisms and agreements.

SUBSEQUENT CHAPTERS

This introductory chapter describes why our nations are seeking closer ties in homeland defense and security. It provides an overview of the diplomatic, informational, military and economic overlap between Canada and the United States. In addition, it provides insight to key political documents such as the *Security and Prosperity Partnership of North America*, the *Canadian National Security Policy* and the *U.S. National Security Strategy*, which enunciate the intent of the President and Prime Minister to establish a continental approach to defense and security. This chapter concludes with discussion of the CANUS strategic planning system to provide the reader with insight to the bi-national political and military interface, and with an overview of the potential impediments encountered with organizational change.

The next chapter is focused upon the first pillar, which is the review and preparation of CANUS deliberate plans, per BPG Terms of Reference (TOR) Tasks 1 and 2 (see Appendix A). Deliberate planning was selected as our first pillar, because we recognize that deliberate planning must occur prior to a crisis in order to detect, deter and thwart an attack, or to save lives in a civil support or a consequence management operation.

In the Canadian Forces Operational Planning Process and U.S. Joint Operations Planning Execution System, the execution or implementation of deliberate plans begins with information sharing. Hence, information sharing is discussed in Chapter 3, per BPG Terms of Reference Task 3.

We subsequently asked, “What equipment is needed to more effectively share information?” Therefore, a discussion of Command, Control, Communications and

Computers Architectures (C4A) and Interoperability follows in Chapter 4.

After deliberate planning has been completed, the strategic-theater and operational commanders conduct joint and combined training and exercises to refine their plans. Hence, Chapter 5, Exercises, Training and Validation, provides recommendations to support BPG TOR Tasks 4, 5 and 6.

This report then focuses on enablers, or the foundation, for the four military-oriented pillars by discussing bi-national agreements and other coordination mechanisms in Chapter 6 to address BPG TOR Task 7.

Finally, Chapter 7 presents some new concepts (notional concept in Figure 6), to stimulate discussion on future relationships among CANUS defense and security organizations. These discussions can potentially be used by senior leadership in developing a bi-national vision and strategy for continental defense and security, addressing issues and challenges identified in this report.

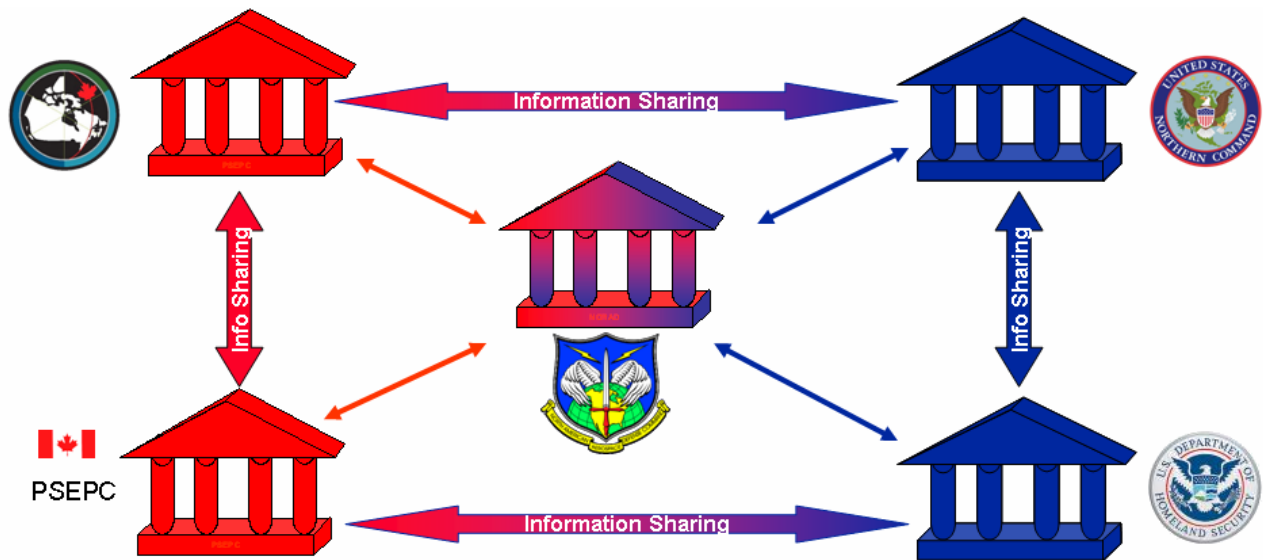
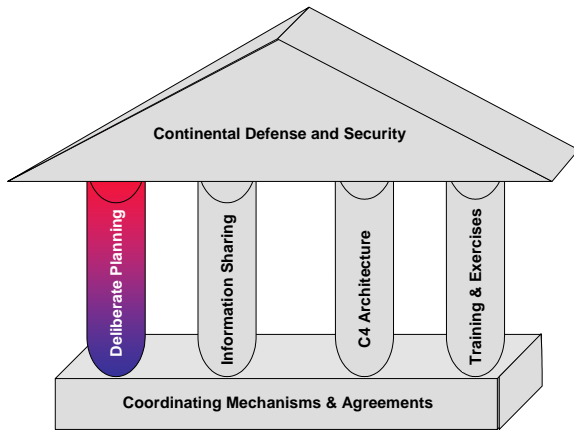


FIGURE 6: INTEROPERABILITY, NOT INTEGRATION

[This figure notionally shows national interoperability and information sharing between Canada Command (top left) and Public Safety and Emergency Preparedness Canada (PSEPC - bottom left); national interoperability and information sharing between United States Northern Command (top right) and the Department of Homeland Security (DHS - bottom right); information sharing conducted within the parameters of national laws is also represented by a red and blue arrow between Canada Command and U.S. Northern Command, as well as between PSEPC and DHS. In the center is the North American Aerospace Defense Command (NORAD), which is a bi-national organization that has Canadians and Americans working side-by-side on a daily basis. This figure is not intended to convey a senior-subordinate command or control relationship]

CHAPTER 2. REVIEW AND DEVELOPMENT OF CANUS PLANS



I. INTRODUCTION

Chapter 1 introduced continental defense and security as a visionary concept that is supported by four pillars and a base. The first pillar symbolizes deliberate planning, which enables Canadian and U.S. forces combined operations. Per its TOR, the BPG focused on reviews of all existing CANUS defense plans with the intention of understanding their status and improving CANUS land and maritime defense planning. The TOR tasked the BPG to develop detailed bi-national maritime, land and civil support contingency plans. Additionally, the BPG reviewed many military assistance protocols, focusing on documents most significant to the BPG's work.

The BPG then made specific recommendations with respect to some of these protocols to improve CANUS land and maritime defense. In addition, in developing a Bi-National Document Library, the BPG compiled and reviewed many other documents related to CANUS defense and security issues (see Chapter 6 and Appendices F and G for brief descriptions of these protocols).

II. BOTTOM LINE UP FRONT

Deliberate planning is needed for the effective and efficient defense and security of our nations. The BPG has determined that Canadians and Americans working side by side are much more effective at working toward common goals than geographically separated national staffs that meet twice per year or merely coordinate by phone.

Deliberate planning is greatly facilitated by a dedicated, assigned staff. A combined staff with both authority and responsibility is essential to efficient, effective and thorough CANUS plan development. To ensure maximum results, this planning staff must be directly accountable to both nations' strategic-theater/operational commanders.⁵⁷ It must also provide periodic updates to and from senior leaders to receive executive level guidance. CF OPP and U.S. JOPES provide the vehicles for executive leaders' guidance to maintain plan development momentum and are essential components of the CANUS plan development process. Also, the OPP/JOPES processes systematically facilitate bi-national information sharing, and provide for natural interaction between staffs, which facilitates resolution on key issues.

National plans have the requisite information to support joint and combined operations. But the key to CANUS operations is to plan for interoperability, thereby ensuring that our two nations can work together.

III. RECOMMENDATIONS

1. Provide a formal deliberate planning agreement, describing who is responsible, what goals need to be accomplished, and how often CANUS plans should be updated.

2. Establish coordinating mechanisms or planning bodies that facilitate effective and efficient deliberate planning to bridge any gaps at the strategic-theater and operational levels among NORAD, Canada Command and U.S. Northern Command. One option may be a small bi-national planning organization with Canadians and Americans working side by side.⁵⁸ Regardless, the elements of the bodies or other coordinating mechanisms should include or consider:
 - a. Mission. Review and update CANUS deliberate plans for continental security and defense.
 - b. Authority. Planning organization(s) or other coordinating bodies should be granted both responsibility and authority for the mission and be accountable to the Commanders of NORAD, Canada Command and U.S. Northern Command.
 - c. Process. Planning organization(s) or other coordinating bodies or planning organization(s) should institutionalize the CANUS Strategic Planning System described in Chapter 1 and Appendix B, which includes routine senior leader reviews and guidance to achieve common continental defense and security objectives (as outlined in JOPEs and CF OPP).
 - d. Coordination Mechanism. Canadians and Americans, working side by side, would staff issues of mutual concern internally and still be able to leverage experts from other commands for resolution of issues.
 - e. CANUS Plan Concept. Critical aspects to the CANUS deliberate plans are their reliance on the national

defense plans. These CANUS plans should provide appropriate guidance to cover gaps and span or reduce seams between the national plans.

3. Study the effectiveness of merging strategic-theater and operational documents. Canada Command and U.S. Northern Command should consider melding the CANUS Civil Assistance Plan (CAP) and Combined Defense Plan (CDP) into a Combined Military Interoperability Plan (CMIP). The proposed CMIP could span the spectrum of missions from civil support to continental defense and security; it could focus on Canada-United States military interoperability across the borders in all domains and missions.

IV. POSSIBLE IMPEDIMENTS TO CHANGE

Chapter 1 identified that human nature resists organizational change due to the uncertainty that it creates. In this chapter, we identify systematic problems that contributed to outdated CANUS planning. In addition, we made recommendations to improve CANUS deliberate planning. Impediments to organizational change may occur in three areas:

A. POLITICAL

Political decisions must be made to move toward enhanced military cooperation. Although the *Security and Prosperity Partnership of North America* and other documents establish the intent to work “continentally,” this has not been formally communicated at the strategic-political level to NORAD, Canada Command and U.S. Northern Command via an agreement.

B. CULTURAL

Within Canadian and U.S. military cultures, deliberate planning is a normal process that recurs on a bi-annual basis. Both CF OPP and JOPES mandate a bi-annual review of deliberate plans;⁵⁹ although this may occur more often based on changes in the threat environment or a change in commanders. However, relationships among the militaries of democratic nations will normally not do formal deliberate planning with other nations, without direction to do so from their political leaders. Hence, a CANUS agreement is needed to garner full commitment from both militaries. With this direction, both militaries will systematically conduct deliberate planning.

C. STRUCTURAL

Conducting the deliberate planning steps identified in this chapter results in commander's intent, followed by staff estimates with multiple courses of action, and then a decision as to which course of action best accomplishes the mission. Structural or strategic designs such as

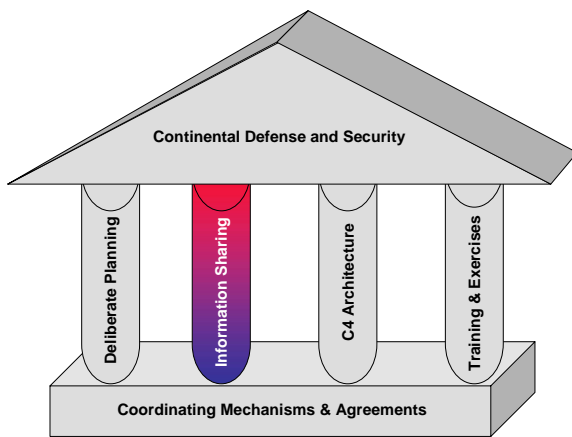
forming a Combined Task Force (CTF), creating a sub-unified command or assigning liaison officers to a different command are the direct result of this process; hence, they will not be identified without conducting OPP/JOPES planning. In addition, changes to structural and strategic design normally evolve from lessons learned during exercises, which will be discussed further in Chapter 5.

D. SUMMARY

The political mandate to develop deliberate plans must occur before obtaining cultural commitment from each organization. Once that commitment is made, then the systematic processes defined by CF OPP and JOPES result in the optimal strategic design. Analysis indicates that these political agreements should indicate "what" needs to be accomplished, and then the military leaders will decide "how" to do it.

Additional information and background data on deliberate planning can be found in Appendix B.

CHAPTER 3: INTELLIGENCE AND INFORMATION SHARING



I. INTRODUCTION

The second pillar, intelligence and information sharing, must be planned and executed in as seamless a fashion as possible to conduct deliberate planning (as described in Chapter 2 and Appendix B). This pillar is even more critical during crisis action procedures and subsequent execution. When the BPG began its investigation of the CANUS military relationships, we found several indicators that people and organizations on both sides of the border *were* communicating, but were typically doing so in an ad-hoc fashion.

We examined communications links and related opportunities for improvement as part of an information-sharing gap analysis. We then looked for additional government and/or academic studies that supported or refuted our initial findings. Furthermore we developed our qualitative analysis using focus sessions, numerous tabletop exercises and a counter-intelligence / law-enforcement (CI/LE) conference with agencies represented from Canada and the United States.

II. BOTTOM LINE UP FRONT

Intelligence and information sharing are of critical importance to the combined defense and security of Canada and the United States.⁶⁰ The awareness of the threat changed dramatically after the attacks of 9/11, hence intelligence and information sharing within and between Canada and the United States needs to be systematically codified in order to enhance awareness of potential threats to the security of either nation. That being said, progress is being made,⁶¹ but much work remains to be done, since effective sharing needs to incorporate all of the agencies that play a role in homeland defense and security.⁶² One of the challenges facing both countries domestically, as well as bi-nationally, is to understand culture and national sensitivity issues. Once these issues are addressed, information sharing should improve dramatically. The ultimate goal is timely and accurate sharing of information and intelligence between both countries and among all agencies, while operating within the parameters of national policies and laws.⁶³

Most important to our analysis was an impartial focus on cause and effect. The causal factors that contributed to the weaknesses identified in intelligence and information sharing include:

- Old agreements, plans, policies and/or mechanisms, which had not been updated or renewed on a routine basis, or as the environment changed (discussed further in Chapter 6).
- Organizational cultures and negative inertia that nurture a “need-to-know” vice a “need-to-share” mentality.

- Policies that have plenty of inhibitors, but few motivators or rewards to enable information sharing.
- Incorrect classifications or default classifications have been used that resulted in “Canada Eyes Only” (CEO) or “Secret-Not Releasable to Foreign Nationals” (NOFORN) classifications, when “Releasable to Canada and the United States” (RELCANUS) could be used and/or would be more appropriate. (For example, changing defaults in document classification or using tear sheets to share information while maintaining integrity of sources.)
- Not using the more practical methods available to implement more effective information and intelligence sharing.

NORAD and U.S. Northern Command have made significant progress in improving information sharing between Canada and the United States. Some technical challenges have been identified with limitations imposed by communication tools that remain one of the largest obstacles to effective information sharing. Operational use of the “U.S. Only” Secret-level Internet Protocol Router Network (SIPRNET) makes it more difficult and time consuming for key North American defense and security partners to share and receive some classified information. This is because cross-domain posting can be inefficient and tedious, and waiting for downgrades to RELCANUS can be very time consuming as well (this issue is addressed further in Chapter 4).

However, not every information-sharing example is a negative one. For instance, in June 2005, U.S. Northern Command began a proof-of-concept study that created a temporary Canadian watch-desk in the Joint Operations Center (JOC), which is manned on a part-time basis by Canadian Forces

officers. The objective of this study was to investigate whether a Canadian desk would improve information sharing and expand the Commander's situational awareness of events occurring on both sides of the border. The Canadian Desk was provided with Canadian Forces Command System Classified Work Station, Unclassified Canadian Defence Wide Area Network (DWAN) and the Unclassified, but sensitive, Internet Protocol Router Network (NIPRNET) access and was given broad reach to achieve success.

Since June, U.S. Northern Command experienced a high tempo of operational events, and the Canadian watch-desk proved pivotal in improving situational awareness to Canada through the National Defence Command Centre (NDCC), and to the United States, through the U.S. Northern Command JOC. This was especially effective during relief efforts after Hurricane Katrina.⁶⁴

Due to the success of this study, steps are being taken to make the Canadian desk a permanent, full-time part of the U.S. Northern Command JOC. Information sharing at the theater-strategic and operational levels provides better situational awareness to decision makers. The existence of a Canadian desk within the NC JOC is a success story, and is encouraged for all CANUS operations centers.

III. RECOMMENDATIONS

1. Develop and implement a new nation-to-nation information sharing agreement⁶⁵ among Public Safety and Emergency Preparedness Canada, Foreign Affairs Canada, the Royal Canadian Mounted Police, the Canadian Security Intelligence Service and the Canadian Department of National Defence and the United States Departments of State, Homeland

Security, Justice and Defense that incorporates the following elements:⁶⁶

- a. To protect shared information, representatives from each department/agency collaborate to develop standardized, bi-national non-disclosure agreements for execution by appropriate individuals.
 - b. Members of the departments/agencies receive standardized security briefings and training.
 - c. Leaders within each department/agency continue to foster and implement action plans to ensure a shift from a “need to know” to a “need to share” culture, and members of each department/agency share information freely with members of other departments/agencies who have appropriate security clearances.
2. Due to the length of time it takes to approve a nation-to-nation information sharing agreement, U.S. Northern Command and Canada Command should consider developing and implementing an Information Exchange Annex (IEA) to the *American, British, Canadian, Australian and New Zealand (ABCANZ) Combined and Joint Multilateral Master Military Information Exchange MOU (CJM3IEM)* using some or all of the elements of the recommended information sharing agreement listed above in recommendation 1.
 3. Explore staffing of a foreign disclosure waiver for designated members of NORAD, Canada Command and U.S. Northern Command; and broaden the scope of this waiver to include Canadian and/or American watch-standers and

operational planners in other battle staff cells.⁶⁷

4. NORAD, Foreign Affairs Canada, U.S. Department of State, Canada Command, U.S. Northern Command, the Canadian Strategic Joint Staff (SJS) and the U.S. Joint Staff should pursue a concerted effort to classify and release briefings and/or information at the Releasable to Canada and United States (RELCANUS) level. If the lower classification is insufficient for the content, develop two versions of the briefing / information product, such as SECRET/NOFORN and SECRET/CEO.
5. Investigate and pursue options for the transfer of *appropriate* operational information and/or intelligence from the SIPRNET to a broader classified or unclassified, restricted inter-agency / alliance collaborative environment. This would support movement of unclassified but sensitive information to a wider audience. In the interim, select Canadians should be cleared to use the SIPRNET system to support the CANUS defense and security mission. Also, if all cleared Canadians could use SIPRNET, then the NORAD RELCAN system could be eliminated.
6. Expand on the GRIFFIN operational information sharing capability to include permanent chat capability with trusted continental defense partners. Improve the use of GRIFFIN classified e-mail. Integrate additional features, which facilitate bi-national information exchange and all-domain CANUS operational information sharing and collaboration capability using GRIFFIN or a GRIFFIN-like virtual network model.⁶⁸

7. Expand the Information Exchange Process (IEP) concept among NORAD, Canada Command and U.S. Northern Command using the following recommendations to foster the implementation process:
 - a. Investigate capability requirements for NORAD, Canada Command and U.S. Northern Command synchronization and reporting logs (e.g. ability to cross communicate).
 - b. During bi-national contingencies, be prepared to deploy an Information Exchange Broker (IEB) team from U.S. Northern Command to Canada Command to facilitate information flow and shared situational awareness.
 - c. In the short term, invite personnel involved in IEB implementation with Canada Command to observe how NORAD and U.S. Northern Command utilize the IEP in exercises and to participate in training opportunities. Longer term, develop CANUS common processes.
 - d. Provide additional IEB concept training opportunities and dialogue regarding bi-national collaboration-tool suite standardization. Training should involve the deployed NORAD and U.S. Northern Command IEP team facilitating information flow and shared situational awareness among NORAD, Canada Command and U.S. Northern Command; it should include surveying bi-national information flow and examining shared situation awareness capability needs.
8. Update the CANUS Threat Estimate in a networked, virtual environment to enable real-time collaboration and rapid production of high-quality intelligence, information sharing and planning products on an “as required” basis rather than just annually. Analysts from NORAD, Canada Command and U.S. Northern Command should be actively involved, and the document should reside on a classified portal for easy updates.

IV. POSSIBLE IMPEDIMENTS TO CHANGE

A. POLITICAL

As indicated in the “deliberate planning” discussion, the lack of a political agreement is an impediment to bi-national/bi-lateral information sharing. A new information sharing agreement would provide political direction and a legal basis for passing sensitive information across both borders and among different agencies, since there is fear of being prosecuted for sharing too much.

B. CULTURAL

The biggest impediment to being able to “connect the dots” is the human or organizational resistance to sharing information. Numerous reports and commissions have identified the need to shift from an information-protection to an information-sharing paradigm. Seamless information sharing will not occur among Canadian and U.S. agencies or among NORAD, Canada Command and U.S. Northern Command unless an international agreement directs them to do so.

C. STRUCTURAL

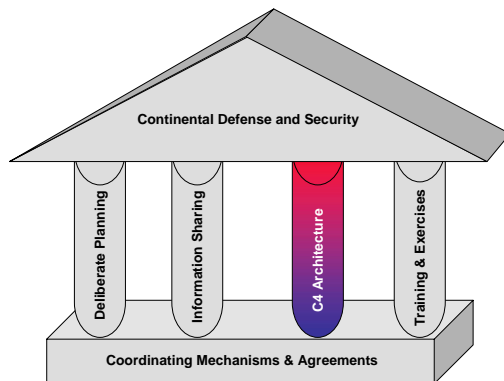
The NORAD-U.S. Northern Command Combined Intelligence and Fusion Center (CIFC) was developed to promote information sharing between the disparate subordinate elements of both commands. The nascent Canada Command needs to be brought into this arrangement in a systematic manner to preclude ad-hoc or personality driven information sharing once it reaches full operational capability. U.S. Northern Command has made great strides by creating an Interagency Coordination Directorate; however a similar arrangement does not yet exist in Canada Command with Canadian agencies. “Additionally, as U.S. Northern Command transitions from the CIFC to the new Joint Intelligence Operations Center (JIOC), this will require the placement of Canadian Forces personnel in key positions throughout its developing structure to ensure seamless information sharing.

D. SUMMARY

The political mandate from the senior leaders of both nations is essential to obtain unconditional cultural commitment from each organization. After this organizational commitment is made, then the systematic processes will be developed through the staff estimate processes in CF OPP and JOPES. This will then result in the optimal information sharing design among each of the defense and security stakeholders. Once again, BPG analysis emphasizes that political agreements should provide the authority to share. Once obtained, the Commanders of NORAD, Canada Command and U.S. Northern Command will determine the optimal way to do it.

Additional information and background data on information sharing is in Appendix C.

CHAPTER 4. COMMAND, CONTROL, COMMUNICATIONS AND COMPUTER (C4) ARCHITECTURE AND INTEROPERABILITY



I. INTRODUCTION

Chapter 3 described opportunities for improvement and recommendations related to CANUS information sharing policies and agreements. The third pillar described in this chapter complements the preceding chapter, since information sharing cannot occur without the proper equipment and protocols. Once bi-national or multinational information-sharing agreements are in place, which permit and encourage information sharing between Canadian and U.S. forces, then a strategy is needed to implement a bi-national information sharing architecture that creates synergy across all domains.

II. BOTTOM LINE UP FRONT

There is a critical need for interoperability⁶⁹ among North American defense and security partners to achieve full network-centric operations (NCO) / network-centric warfare (NCW)⁷⁰ capabilities. The North American defense and security “community of interest” needs to define and publish bi-national operational capability requirements. Furthermore, a national and bi-national network-centric solution needs to be developed for classified and unclassified systems between Canadian and U.S. militaries and

intergovernmental organizations. NORAD-U.S. Northern Command J6 has done groundbreaking work in the development of a next-generation common operational picture (COP), which, to the extent possible, should be expanded to include Canada Command, Public Safety and Emergency Preparedness Canada, Department of Homeland Security and the Department of Justice.

The BPG assessed mission-essential information capabilities to identify current national and bi-national capabilities. This assessment generates initial seam and gap awareness, and it provides a tool for North American defense and security ‘Community of Interest’ requirements definition. Since the assessment is classified, it will be provided separately from this report, to Canada Command J6 and NORAD/U.S. Northern Command J6.

Once a bi-national Agreement has been approved by leaders of both nations, then the detailed analysis of Canadian and U.S. circuits, networks, systems and tools can proceed in full, with a goal of immediate, reliable communications (data and voice) that are survivable, flexible and interoperable with civilian partners in defense and security.

III. RECOMMENDATIONS

1. Advocate development of a ‘Community of Interest’ (COI) capability-needs definition, which will help eliminate operational gaps, shortfalls and duplications among NORAD, Canada Command and U.S. Northern Command, across air, maritime and land domains in concert with COI capability requirements.

2. Exploit the work done to date on the Alaskan Land Mobile Radio (ALMR) Project and the NATO Network-Centric Capability (NNEC) feasibility study to enhance interoperability (see Appendix D).
3. Develop a bi-national set of metrics for network-centric applications among NORAD, Canada Command and U.S. Northern Command.⁷¹ While the assessment of military-to-military systems is conducted, an assessment of military-to-civilian systems compatibility must be conducted as well to support PSEPC and DHS.
4. Connectivity must become better near-term. To this end:
 - a) Expand SIPRNET presence for U.S. personnel stationed in Canada.
 - b) Leverage GRIFFIN between Canadian Forces' Command and Control System (CFCS) and the U.S. SIPRNET to conduct better CANUS information sharing.
5. Longer-term/future goals.
 - a) A CANUS government-to-government circuit that supports a North American defense and security (voice and data) and accommodates distribution of national systems within both countries.
 - b) Future tools and systems that promote COI access with common or interfaced solutions.

IV. POSSIBLE IMPEDIMENTS TO CHANGE

A. POLITICAL

As indicated in the “information sharing” discussion, a political agreement is needed for enhanced information sharing. That agreement should have elements that enable NORAD, Canada Command and U.S. Northern Command to develop an effective and efficient command, control, communications and computer (C4) architecture. Although both nations have stated that transformation and network-centric operations are their strategic goals, these concepts have not been fully implemented in a bi-national environment. Political direction must occur to affect that change.

B. CULTURAL

We stated that the biggest impediment to being able to “connect the dots” is the human or organizational resistance to sharing information. Seamless information sharing will occur between Canadian and U.S. agencies and among NORAD, Canada Command and U.S. Northern Command once there is an international agreement, and senior leadership direction to do so.

However, the second biggest impediment is technology, or the means by which to communicate. If information sharing agreements are in place, and the organizational culture has shifted from a “need-to-know” to a “need-to-share” paradigm across our shared boundary, then implementing these concepts becomes a technology issue, not a cultural issue.

C. STRUCTURAL

NORAD has a robust C4 architecture, which ensures fast and efficient near real-time sharing of information for threats that reside in the aerospace domain. The NORAD C4 architecture was developed over the past 47 years; however, U.S. Northern Command (which is at full operational capability) and the nascent Canada Command (which became operational on 1 Feb 2006) are organizations that must in the near future analyze how to ensure full compatibility between their disparate CANUS C4 systems. This point is emphasized within the recently released *The Federal Response to Hurricane Katrina Lessons Learned*, which spoke to the need for interoperability. The White House Report identified that a “lack of interoperable communications was apparent at the tactical level, resulting from the fact that emergency responders, National Guard, and active duty military use different equipment.” BPG believes that this lack of interoperability

could be heightened in an international or border operation.

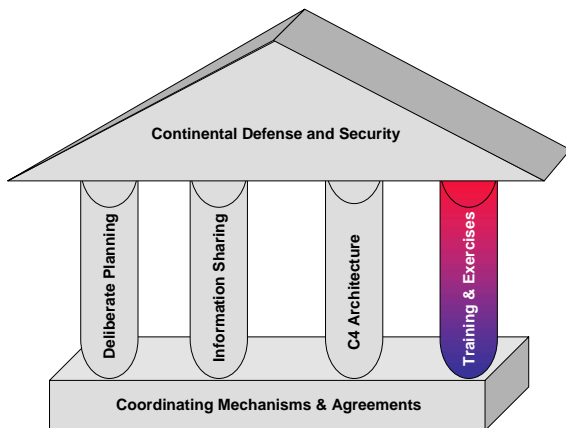
The BPG recommends further use and development of the GRIFFIN software until a longer term, network-centric solution can be implemented. The BPG supports U.S. Northern Command advocacy for the adoption of the Multi-National Information Sharing (MNIS) solution as the GRIFFIN follow on.

D. SUMMARY

The political mandate from the senior leaders of both countries directing and encouraging information sharing must occur before cultural commitment and C4 architecture changes can occur.⁷²

Additional information and background data can be found in Appendix D.

CHAPTER 5. EXERCISES, TRAINING, AND VALIDATION



I. INTRODUCTION

The fourth pillar supporting continental defense and security is focused upon Canadian and U.S. training and exercises. The BPG's terms of reference charged us to "design and participate in exercises; plan and participate in joint training programs; and validate plans prior to approval."⁷³

The *BPG Interim Report* articulated limits on the BPG's ability to accomplish these tasks, since the BPG was not staffed or resourced to do larger-scale bi-national exercises. As such, the BPG adopted a proactive stance, to promote an enhanced working relationship between Canadian SJS J7 and NORAD-U.S. Northern Command J7.

The BPG continuously identified new areas, forums and issues that required bi-national military and inter-departmental education, training and exercise and supported the efforts of SJS and U.S. Northern Command in their resolution. Chapter 1 discussed the CANUS Strategic Planning System and identified CANUS training and exercises as a critical feedback mechanism (see Figure 4).

In addition, CANUS training and exercises are critical enablers for the development of deliberate plans and potential changes in strategic design. This chapter expands upon those concepts and provides recommendations for enhancing future CANUS military cooperation.

II. BOTTOM LINE UP FRONT

NORAD regularly schedules and conducts bi-national exercises to rehearse responses to threats in the aerospace domain. However, in the past decade, Canada and the United States have not routinely conducted joint and combined⁷⁴ *homeland defense* training exercises at the strategic or operational levels, within the land or maritime domains,⁷⁵ or in support of bi-national defense support of civil authorities (DSCA).⁷⁶ Joint and combined exercises conducted across all domains would not only enhance defense of our homelands, but could also provide added benefits to CF and U.S. forces prior to their deployment to an overseas crisis, disaster or emergency.⁷⁷

NORAD-U.S. Northern Command J-7 has done significant work in bi-national exercise planning, which must be expanded to ensure seamless interoperability with the emerging Canada Command. The creation of Canada Command necessitates a different approach to bi-national training and exercises. The Canadian Chief of the Defence Staff is splitting responsibilities between the revised Strategic Joint Staff (SJS - strategic tasks) and Canada Command (operational tasks). The impact of this split is of importance to both NORAD and U.S. Northern Command. Specifically, it must be identified who has the responsibility for the planning and preparation of CANUS strategic, theater and operational-level plans, their related bi-

national exercises, operations tempo and real-world interoperability among NORAD, Canada Command and U.S. Northern Command.

III. RECOMMENDATIONS

1. NORAD, Canada Command and U.S. Northern Command must develop a common interagency, intergovernmental, and bi-national Combined and Joint Mission Essential Task List (CJMETL).⁷⁸ The CJMETL should be developed to support the CAP and CDP, which are discussed in Appendix B.
2. Once an approved CANUS CJMETL is developed, a joint and combined, multi-year exercise program should be created to synergize efforts in defense, including: defense support of civil agencies; effects mitigation and remediation of attacks from chemical, biological, radiological, nuclear and high-yield explosive (CBRNE) attacks; and response to natural catastrophes.⁷⁹
3. The NORAD, Canada Command and U.S. Northern Command exercise programs should include extensive involvement from PSEPC and the U.S. DHS and other members of the interagency community to develop a closer and more complementary relationship.⁸⁰
4. The interoperability of maritime domain awareness and surveillance within NORAD, Canada Command and U.S. Northern Command will require bi-national education, training and confirmation of policies, doctrine and tactics, techniques, and procedures (TTP) before this issue can be properly exercised and validated.

5. Canadian Defence Academy and Canada Command should coordinate with NORAD, the U.S. Northern Command, and the U.S. National Defense University (and other U.S. military academies or schools) in leveraging the academia of both countries to cooperate and collaborate on the Homeland Security and Defense Education Consortium (HSDEC). The thrust should be to promote research and development of innovative approaches to the problems and issues affecting continental security and defense.⁸¹
6. NORAD, Canada Command and U.S. Northern Command should cooperate to create a policy that facilitates joint and combined training and education, with follow-on assignments that utilize this specialized expertise. As an example, expand Canadian participation in Joint Specialty Officer (JSO) training and a continuing education or professional development program that focuses on joint and multinational operations with a domestic rather than an international contingency focus.⁸² This policy should promote renewed emphasis on Canadian attendance at the Joint Forces Staff College and CF/U.S. officer attendance at the respective war colleges or staff colleges, with follow-on assignments at NORAD, Canada Command and U.S. Northern Command.⁸³

IV. POSSIBLE IMPEDIMENTS TO CHANGE

A. POLITICAL

As indicated in the deliberate planning, information sharing and C4 architecture discussions, an international agreement is needed for CANUS training and exercises as well. At the political level, there is a small,

but vocal minority that worries about the loss of sovereignty whenever U.S. troops are on Canadian soil and vice versa. A new international agreement, such as the CDSA which was discussed previously, should include guidance on what to train and how often. Given this political guidance, bi-national and/or bilateral training and exercises will occur.

B. CULTURAL

Assuming that deliberate planning has been implemented and that seamless information sharing is occurring among Canadian and U.S. agencies, as well as among NORAD, Canada Command and U.S. Northern Command, then the organizational culture will support bi-national training and exercises [per the CF OPP/JOPES process described in Appendix B]. CANUS training and exercises provide the essential feedback loop to improve deliberate plans, information sharing and C4 architecture. The more frequently Canada and U.S. train together, the better the combined organizational culture will become.

C. STRUCTURAL

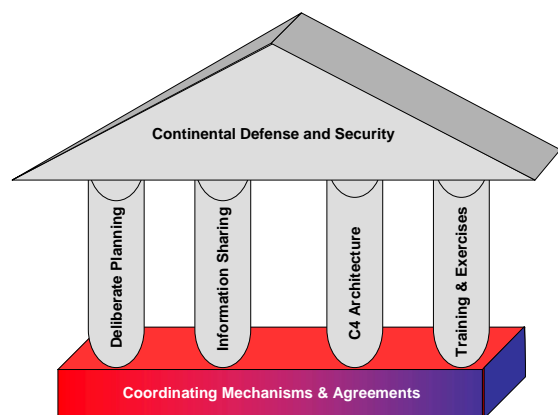
As stated previously, part of the entire plans, operations and training paradigm is to integrate all these concepts into a continuous loop so each exercise will help improve military performance while serving as the lead in homeland defense or supporting other departments in homeland security. The joint and combined exercises should follow deliberate-planning, not precede it. Hence, a lack of approved CANUS deliberate plans is an impediment to effective and efficient training.

D. SUMMARY

The political mandate directing and encouraging deliberate planning, information sharing and C4 architecture from the senior leaders of both nations is also needed for joint and combined training among NORAD, Canada Command, and U.S. Northern Command. It would ensure that the intent of our senior elected leaders is fulfilled.

Additional information and background data can be found in Appendix E.

CHAPTER 6. COORDINATING MECHANISMS, INCLUDING BI-NATIONAL AGREEMENTS



I. INTRODUCTION

In its TOR, the BPG was tasked to establish appropriate coordinating mechanisms with relevant Canadian and U.S. federal agencies, including civilian agencies.⁸⁴ In the figure above, we identify coordinating mechanisms, including international agreements as the base or the foundation upon which the military pillars rest. Coordinating mechanisms can include: agreements, Memoranda of Understanding (MOU), exchange and/or liaison officers, direct and integrated staffing, integrated C4ISR architectures, information sharing, exercises and plan development. The BPG implemented, tested or enhanced many coordinating mechanisms impacting the Canada-United States defense relationship, including a review of hundreds of bi-national agreements and other documents. In addition, as discussed in the preceding chapters, the BPG identified other requirements for coordination among military entities, other government entities, and non-government entities. Current coordinating mechanisms and international agreements, which are updated to keep pace with changes in the strategic environment, are an essential “base” or “foundation” for the four military pillars.

II. BOTTOM LINE UP FRONT

Coordinating mechanisms are integral to the Canada-United States continental defense and security relationships. A continental approach to enhanced defense and security of both nations will require the militaries and civil agencies to continue the development of mechanisms, which will increase coordination, cooperation and communication. Coordinating mechanisms can take a variety of forms, such as agreements or MOUs, staffing, information sharing, C4 architecture, training and exercises, and plan development. They can be bi-lateral or bi-national; military-to-military; military-to-civil agency; or in the form of strategic political guidance.

If our coordinating mechanisms are well developed in advance, Canada and the United States can be fully responsive to significant threats and events affecting our shared continent. The need for specific coordinating mechanisms must continually be examined, challenged and formalized. The key is to develop the optimum combination of coordinating mechanisms, which will identify and achieve the best relationships possible.⁸⁵

III. RECOMMENDATIONS

1. NORAD, Canada Command and U.S. Northern Command should examine the full range of coordinating mechanisms and formalize them to ensure seamless operations.⁸⁶ These coordinating mechanisms can be bi-lateral or bi-national, and military-to-military or military-to-civil agency; and these mechanisms should include the appropriate use of exchange and liaison personnel and combined exercises,

with a focus on plan development. In particular, examine Canada Canadian Strategic Joint Staff and Canada Command's future requirements through staff officer coordination and analysis during future NORAD and U.S. Northern Command exercises and develop coordination models that allow for the seamless coordination among NORAD, Canada Command and U.S. Northern Command battle staffs.

2. Update the *Principles and Procedures for Temporary Cross-Border Movement of Land Forces*, dated 13 March 1968. An analysis of the Agreement, a list of deficiencies and a list of elements to consider in a new agreement are included at Appendix F, Tab A.

3. Support the Quadrennial Defense Review⁸⁷ initiative to change U.S. federal law to permit Weapons of Mass Destruction-Civil Support Teams to operate (in Title 10 status) in Canada, particularly with respect to border events.⁸⁸ See Appendix F, Tab B for a full analysis of this issue.

4. With respect to the movement of Canadian and U.S. military personnel across the border for military operations, including military-to-military support to civil authorities, Foreign Affairs Canada, U.S. Department of State, Canada Command, U.S. Northern Command, border agencies and other appropriate military and civil entities should work together to ensure processes are in place to fully address cross-border movement legal issues prior to deployment.

5. Canada Command, U.S. Northern Command, and other appropriate military and civil entities should work together to develop checklists, proposed language for nation-to-nation agreements, Civil Assistance Plan annexes, and other supporting products to facilitate movement of Canadian Forces

and U.S. military medical professionals across the border, for possible treatment of military and civilian personnel when required. An analysis of this issue is at Appendix F, Tab C.

6. Continue to study and advocate for assignment of appropriate civil agency representatives from Canada and the United States to the NORAD and U.S. Northern Command's Interagency Coordination Directorate and to Canada Command (e.g. PSEPC and RCMP).

7. NORAD-U.S. Northern Command staff should continue maintenance of an on-line document library, which includes the documents in the current Bi-National Document Library; and, ensure that it continues to be made available to military and civil agency personnel, to enhance planning and operations related to CANUS security and defense.

8. Consider the *Planning Considerations for Use of Force in Canada-United States Operations* at Appendix F, Tab D, which provide foundational principles, related to the use of force in the context of CANUS combined operations.

9. Canada Command and U.S. Northern Command should participate in meetings related to CANUS emergency management and assistance civil regional arrangements, such as the Pacific Northwest Emergency Management Arrangement with the following initial goals:

- a) Ensure regional arrangements are formalized as appropriate and investigate where Canada Command and U.S. Northern Command could add synergies.

- b) Reinvigorate the Consultative Group on Comprehensive Civil Emergency Planning and Management, as mandated by the 1986 (and 1998 extension) *Canada-U.S. Agreement on Cooperation in Comprehensive Civil Emergency Planning and Management*.
- c) Ensure there is appropriate federal military coordination with these regional arrangements, while recognizing that the arrangements are generally civil, not military, and that they are between states and provinces or territories.

IV. POSSIBLE IMPEDIMENTS TO CHANGE

A. POLITICAL

As discussed in Chapter 1, coordinating mechanisms and international agreements, by their very nature, are at the political level grounded in the “interests” of numerous stakeholders, both internal and external to the CANUS defense departments. Decisions relating to cooperation will have political ramifications. Therefore, the proposed Comprehensive Defense and Security Agreement is needed to enable these activities in specific terms. Without expressing clear intent, and establishing specific goals of “what” needs to be accomplished, enhanced military cooperation will not be effective.

B. CULTURAL

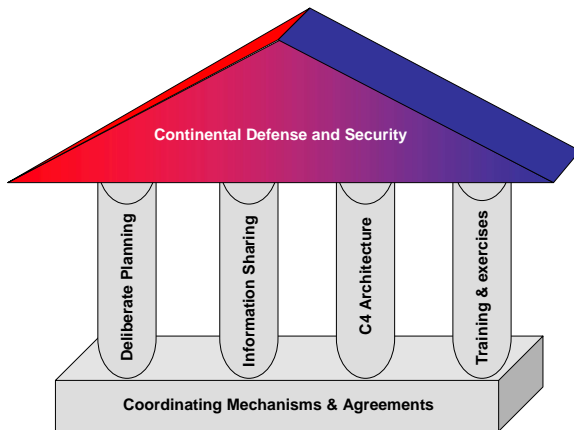
Strong and clear leadership is needed. Bureaucracies generally focus upon incremental changes rather than major change. Yet the times call for major changes in the management of continental defense. For example, the BPG *Interim Report on CANUS Enhanced Military Cooperation* recommended a Continental Defense and Security Agreement, with an implementation goal of the end of 2005, which did not occur. Instead a more incremental approach has been adopted for future changes.

C. STRUCTURAL

Structural and strategic design changes among Canadian and U.S. military and security stakeholders will occur if and when new coordinating mechanisms and international agreements are developed. The two governments need to give clear direction to Foreign Affairs Canada, the U.S. Department of State, NORAD, Canada Command and U.S. Northern Command regarding “what” they want accomplished. At that point the stakeholders will be able to focus on “how” to accomplish their wishes.

Additional information and background data can be found in Appendix F and G.

CHAPTER 7. CANUS DEFENSE AND SECURITY RELATIONSHIPS



I. INTRODUCTION

Chapter 1 described the need for enhanced military cooperation to protect our intertwined economies that represent the CANUS strategic center of gravity. It also discussed the need to synchronize all instruments of national power to ensure the enhanced defense and security of Canada and the United States.

The four pillars and the foundation discussed in Chapters 2 through 6 identified the nature of problems and impediments, leading to recommendations to enhance military cooperation. While these former chapters focused on opportunities for improvements related to the present state of CANUS relationships, this chapter is more forward-looking, providing four possible future concepts related to the enhancement of the CANUS defense and security relationship. As shown in the figure above, this is symbolically represented by the “roof” above the pillars and base.

In this chapter, the BPG makes recommendations for enhanced CANUS cooperation at the political, strategic-national, and strategic-theater/operational levels. It concludes by proposing four

concepts to stimulate discussion on the future relationships among CANUS defense and security organizations.

II. BOTTOM LINE UP FRONT

Since 9/11, Canada and the United States have changed how they view the threat environment. In response to this shift, new defense and security organizations have been created as part of our national strategies. BPG analysis has resulted in four critical findings to enhance CANUS cooperation:

- First, we must recognize that in this new environment, and we cannot fully separate defense and security missions. Both missions overlap, and this overlap of responsibilities will most likely continue to increase;⁸⁹
- Second, interagency coordination and information sharing, among defense and security organizations, *within* each country is essential to defeat both symmetric and asymmetric threats;
- Third, interagency coordination and information sharing, among CANUS defense and security organizations on both sides of the border, are essential to reduce the seams between our nations.⁹⁰ [Note: U.S. Northern Command has made great stride in interagency coordination with national agencies. Similar cross-border initiatives are needed via Canada Command.]
- Fourth, a vision implemented by an international agreement is needed to articulate our senior leaders’ intent. This vision will ensure that our defense and security organizations synchronize their efforts to protect our people.

These steps toward enhanced defense and security will ensure that our interdependent economies and our interwoven critical infrastructures will become markedly less vulnerable to man-made threats, and our defense and security organizations will become increasingly effective in response to natural disasters or emergencies.

In summary, the Bi-National Planning Group is convinced that it is vital to adopt a continental approach to defense and security in order to optimize the effectiveness of both countries' defense and security organizations. The lack of a vision that includes a continental approach will not preclude progress; however, an articulated vision, which provides for a continental approach to be implemented by a Comprehensive Defense and Security Agreement, is necessary to optimize the efficiency and effectiveness of our collective efforts. This is particularly true given the speed with which events can now unfold.

III. RECOMMENDATIONS

1. The BPG recommends that the Governments of Canada and the United States enter into a "Comprehensive Defense and Security Agreement," that would provide the needed political vision, legal authority and overarching guidance for increased information sharing and enhanced cooperation among Canadian and American defense and security partners.
2. At the strategic-national level, develop and disseminate a joint and combined vision that is continentally and globally focused for the future CANUS military relationship. It should outline the desired command relationship among NORAD, Canada Command and U.S. Northern Command, and provide a vision of the

future relationship among these commands.

3. Political Level Coordination. The Permanent Joint Board on Defense (PJBD) should build on its addition of representatives from PSEPC and DHS as full partners.⁹¹ This will provide a strategic forum for senior CANUS decision makers to discuss overlapping continental defense and security issues; it will also provide optimum opportunity for the Co-Chairs of the PJBD to brief key defense and security matters to the Prime Minister of Canada and the President of the United States in a comprehensive and timely manner.
4. Strategic-National Level Coordination. The Military Cooperation Committee (MCC) should continue, as part of its new TOR, to address global and strategic level CANUS military cooperation issues among the Canadian SJS, the U.S. Joint Staff, NORAD, Canada Command, U.S. Northern Command, U.S. Services and Canadian Environment participants.⁹² In addition, operational level tasks listed in the former MCC terms of reference should be transferred to NORAD, Canada Command, and U.S. Northern Command as applicable.
5. Political - Strategic Defense and Security Coordination. Consider the creation of a small, advisory organization that consists of civilian and military members to focus upon continental security and defense issues. This organization could provide support to the PJBD, by working with DOD, DND, DHS and PSEPC with a focus on political-strategic level issues to enhance continental security and defense. This organization should be scalable to engage Mexico in defense and security cooperation under the Security Prosperity

Partnership, as well as other countries within North America.

IV. POSSIBLE IMPEDIMENTS TO CHANGE

A. POLITICAL AND B. CULTURAL

The political and cultural problem is one of vision and intent. A vision implemented by a new agreement is needed to articulate that vision and intent.

C. STRUCTURAL

BPG analysts present the concepts in this chapter as potential solutions to systematic problems identified in the preceding five chapters. However, these structural and strategic design changes among Canadian and U.S. stakeholders will only occur after there are changes in CANUS international agreements.

BACKGROUND AND DISCUSSION

PART I - THE CHANGING CANUS ENVIRONMENT

Prior to 11 September 2001

The modern defense relationship between the United States and Canada dates from 1938. In a speech at Queen's University, President Franklin Roosevelt announced, "the people of the United States would not stand idly by if domination of Canadian soils is threatened by any other empire." This declaration was a surprise to Prime Minister Mackenzie King, who nevertheless replied a few days later that: "We, too, have our obligations as a good friendly neighbor, and one of them is to see that, at our own instance, our country is made as immune from attack or possible invasion as we can reasonably be expected to make it, and that should the occasion arise, enemy forces should not be able to pursue their way by land, sea, or air to the United

States from Canadian Territory." These statements are the basis of the defense relationship our two countries share today. The central points are still that North America is a single military theater, that each country has a duty to help the other to defend it, and that this will be accomplished together.⁹³

For the 47-year period prior to the 9/11 attacks, three organizations formed the nucleus of the Canada – United States defense framework, as shown in Figure 7:

- The Permanent Joint Board on Defence (PJBD);⁹⁴
- The Military Cooperation Committee (MCC);⁹⁵ and the
- NORAD⁹⁶

After 11 September 2001

In the aftermath of 9/11, both nations independently created new national defense and security organizations as part of their national strategies. In addition to the PJBD, MCC and BPG advisory bodies, there are now six principal defense and security organizations within Canada and the United States, as highlighted in Figure 8, including:

- NORAD;⁹⁷
- The United States Department of Justice/Federal Bureau of Investigation (DOJ/FBI);⁹⁸
- The U.S. Department of Homeland Security (DHS);⁹⁹
- Public Safety and Emergency Preparedness Canada (PSEPC);¹⁰⁰
- Canada Command (Canada COM);¹⁰¹
- United States Northern Command (USNORTHCOM).¹⁰²

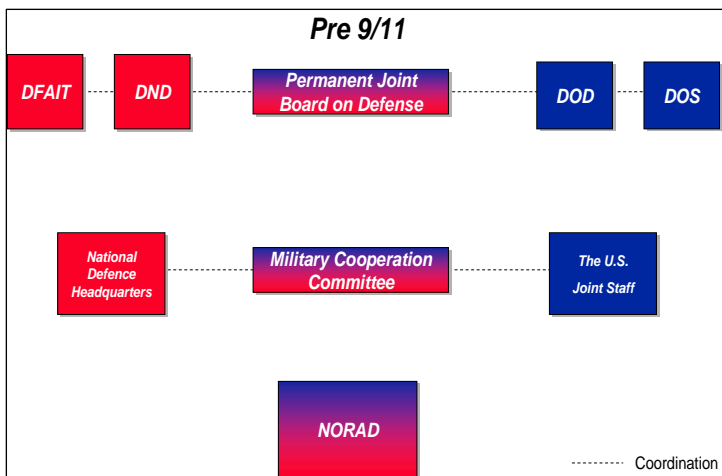


FIGURE 7: CANUS FRAMEWORK PRE-9/11

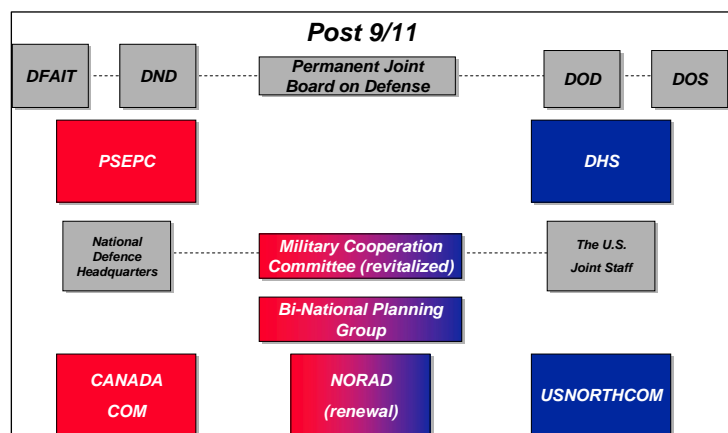


FIGURE 8: CANUS FRAMEWORK POST 9/11

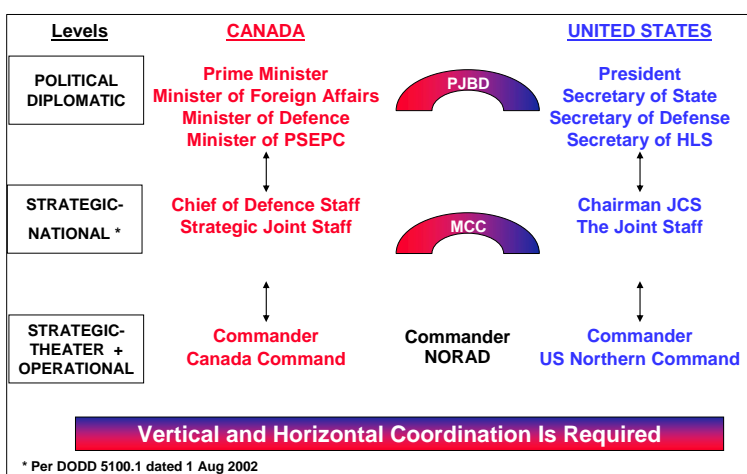


FIGURE 9: THE EMERGING CANUS DEFENSE FRAMEWORK

Since the latter four defense and security organizations are new, there are many communications and coordinating mechanisms among these six organizations that need to be enhanced to ensure the best possible response against common threats or disasters.

In contrast to the bi-national focus of NORAD and the BPG, (as well as the MCC and the PJBD) the newly created national defense and security organizations have a national focus. Hence, there is a new and continual need for bi-national, multinational or continental cooperation among these new organizations systematically to conduct cross border communication and synchronization of efforts.

PART II - THE EMERGING CANUS DEFENSE FRAMEWORK

The BPG has concluded that a new defense and security framework is required to synchronize all stakeholders in the post 9/11 environment, which is characterized by constant change and the need for quicker responses in the aerospace, maritime, ground and cyber domains. The BPG has characterized the new framework for the post 9/11 defense and security environment, which was presented to senior level political and military stakeholders in the PJBD and MCC (see Figure 9).

Three distinct levels, each with its own defined set of functions, characterize this CANUS Defense Framework as follows:

1. Political/Diplomatic Level focuses on the strategic coordination among high-level CANUS political and military leaders. The PJBD is the senior-level bi-national organization at the political-diplomatic level, and its critical function is to ensure coordination and synchronization among

Canadian and U.S. instruments of national power. By providing senior level recommendations on the synchronization of diplomatic, informational, military and economic elements of power, we will achieve enhanced cooperation among CANUS defense and security organizations for the aerospace, maritime, land and cyber defense of North America.

The PJBD forum provides the opportunity for senior CANUS decision makers to discuss bi-national defense and security issues in a timely manner, make key recommendations, and report directly to the Prime Minister of Canada and the President of the United States regarding defense and security matters.

2. Strategic-National Level¹⁰³ focuses on strategic-national level *coordination* between senior military stakeholders in the Canadian Forces Strategic Joint Staff (CF SJS) at Canadian SJS and the U.S. Joint Staff. Important functions at the strategic-national level include: the development of bi-national or multi-national policies and documents such as the update of the CANUS *Basic Defense Document* (BDD), bi-national coordination on programs (e.g. information-sharing), interoperability requirements (e.g. common C4I architecture or exercise coordination), transformation initiatives, and doctrine – joint and combined. The MCC has recently been refocused as the primary strategic staff linkage between the Canadian SJS and U.S. Joint Staff and will now coordinate bi-national military issues among key stakeholders at the strategic level.¹⁰⁴

3. Strategic Theater/Operational Level¹⁰⁵ focuses on coordination among NORAD, Canada Command and U.S. Northern Command. Important functions at this level include information and intelligence sharing, collaborative/cooperative planning,

coordination of daily operations, joint and combined training and exercises, net-centric capability, and interagency cooperation. Coordinating mechanisms are beginning to be formalized between NORAD, Canada Command and U.S. Northern Command; however, it is important to note that these three organizations are not symmetric:

- NORAD is a combined organization, which is focused upon the aerospace domain and is organized regionally; its mission might be expanded to include maritime warning.
- Canada Command is a joint command with a regional focus; and it is organized with subordinate Joint Task Forces with assigned forces; whereas,
- U.S. Northern Command is a unified command with a regional focus that includes 9 countries in its AOR. It is organized with functional commanders and subordinate joint task forces.¹⁰⁶

PART III - FUTURE CONCEPTS

Political and military leaders must evaluate the emerging Canada and U.S. framework in its entirety. As organizations evolve, it is important to ensure that the necessary functions remain and are rationalized within this CANUS defense framework. Changes in national or bi-national organizations will impact the overall framework, and the effects of these changes need to be continually examined and evaluated.

The CANUS framework has both emerging and legacy defense and security organizations; hence the BPG proposes four options or concepts for consideration when discussing the future relationship among CANUS defense and security organizations. These concepts are not intended to be all-inclusive, and are presented primarily to stimulate discussion¹⁰⁷ among the defense and security communities.

The crucial point is that Canada and United States need to develop a shared vision for the future of CANUS defense and security to provide a unity of effort for our institutions and organizations in order to best meet current and future threats facing both nations. Without a concrete vision, organizational relationships may evolve through happenstance rather than design.

Each of the concepts that follow build upon the principles that have contributed to the success of NORAD over the past forty-seven years: flexibility, a continental approach to mutual defense, and Canadians and Americans working side by side to address issues of common concern. Among the key enablers outlined in this chapter, bi-national intelligence and information sharing are paramount. As such, a bi-national organization responsible for all-domain warning for the defense of both nations is a key building block that is present throughout all concepts. Furthermore, the concepts rely upon the establishment of robust coordination mechanisms among all defense and security partners. Finally, the success of these concepts is predicated on leveraging all the key enablers that have been previously mentioned in this chapter.

Given the nature of the BPG mandate, these four concepts focus in more detail on the relationship among defense organizations rather than security organizations. The relationships among security organizations are included, although in a more general nature.

CONCEPT 1: THREE COMMANDS – COMPLEMENTARY MISSIONS

In this concept, the NORAD mission would be expanded to include all-domain continental warning, in addition to aerospace control (see Figure 10). Canada Command and U.S. Northern Command would continue to plan, train and execute unilateral or bilateral missions for the defense of Canada and the United States, respectively, in all domains. Also, CF OPP/JOPEs analysis may identify the need to establish a Combined-Joint Task Force (CJTF) by Canada Command and U.S. Northern Command to address bi-national missions that are outside the scope of NORAD.

Recognizing the pivotal role that intelligence and information sharing play in enhancing defense and security cooperation, this concept would improve upon the current construct by providing the authority and responsibility to a single organization (e.g. NORAD) for all-domain bi-national warning, thereby bridging the current informational seams that exist today.

However, seams may still exist in bi-national plans, operations, training and other areas, since a single organization may not have authority and responsibility in those areas. Hence, there is a need for robust and well-rehearsed coordination. Maximizing coordination mechanisms among all three Commands would mitigate these concerns and serve to limit seams within the continental defense of Canada and the United States.

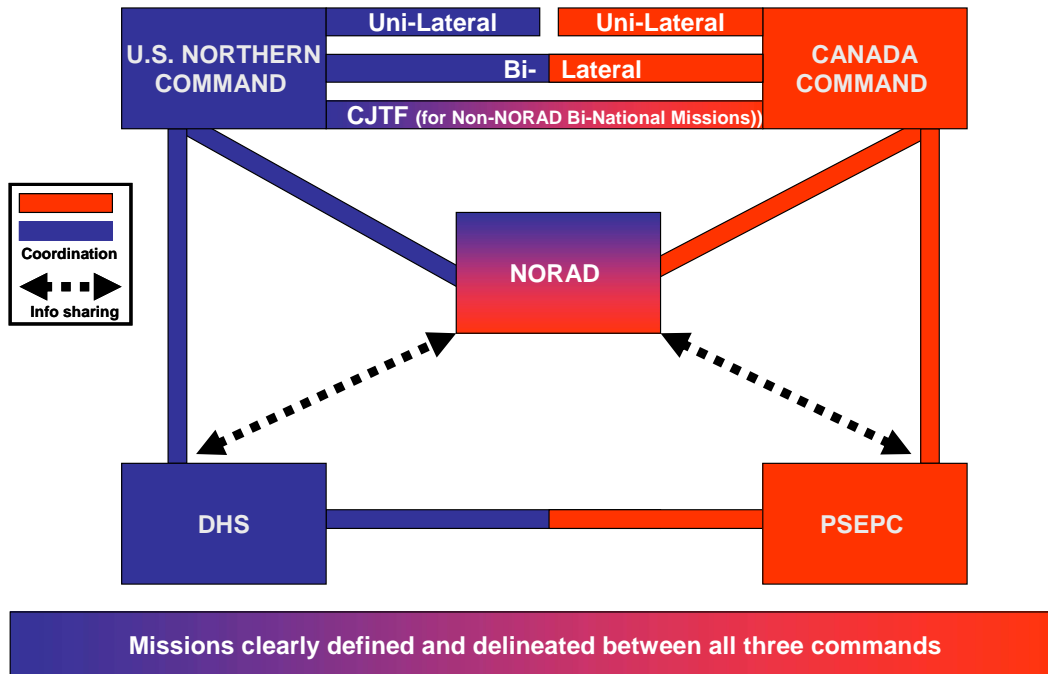


FIGURE 10: CONCEPT 1: THREE COMMANDS – COMPLEMENTARY MISSIONS

From the political perspective, it supports current missions, while building upon the existing NORAD institutional structure, with the addition of all-domain warning. Since NORAD has great appeal among the Canadian public, strengthening NORAD would likely be viewed favorably in Canada. While the United States public may view this option with less enthusiasm, marginalization of NORAD might well create political problems in Canada. Furthermore, the maintenance of three equal commands could result in tensions among these commands. In this concept, there is risk that NORAD could become increasingly marginalized as the prominence of the two national commands continues to grow.

This concept could be expanded to include other countries in the region through the establishment of a new all-domain warning partnership that would strengthen the broader goals of a unified continental defense and security partnership for North America. A key to the success of this option would be the

clear delineation of complementary missions for all three commands (i.e., NORAD, Canada Command and U.S. Northern Command), coupled with the effective and efficient management of overlapping responsibilities.

CONCEPT 2: SINGLE COMMAND FOR CONTINENTAL DEFENSE

This concept effectively expands the NORAD institutional structure to an all-domain North American Defense Command (see figure 11). Under the authority of both national governments, this command would be established to provide all domain warning and response to asymmetric threats and attacks against Canada and the United States. Canada Command and U.S. Northern Command would maintain the capability to respond unilaterally to threats against their respective countries, specifically in situations where both Canada and United States national interests varied and a combined response was not deemed appropriate.

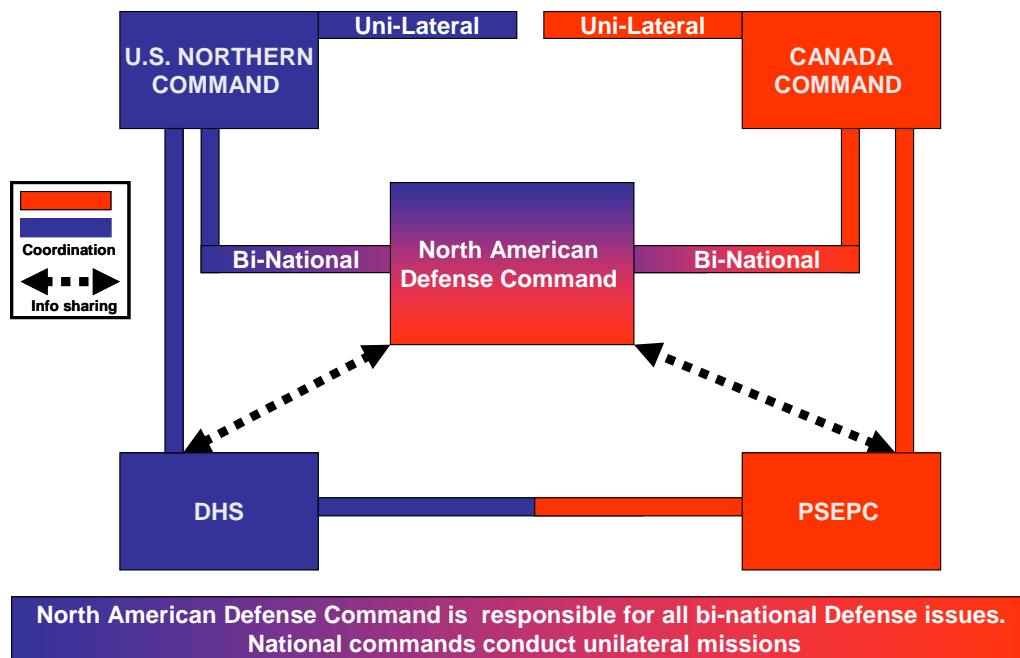


FIGURE 11: CONCEPT 2 - SINGLE COMMAND FOR CONTINENTAL DEFENSE

Concept 2 would enhance operational effectiveness by eliminating the current seams or gaps existing in all defense domains.¹⁰⁸ Information sharing, continental planning, and the coordination of joint and combined bi-national training and exercises would be improved through the creation of a permanently staffed bi-national command responsible to both governments.

From the political perspective, this concept would build on the existing NORAD institutional structure. Since NORAD has great appeal among the Canadian public, strengthening NORAD to a larger, more comprehensive North American Defense Command might be received favorably in Canada; however, concerns over sovereignty and maintaining freedom of action will likely emanate from both nations. Further, this option is counter to the prevailing trends in Canada and the United States towards the strengthening of their national defense Commands.

Since this joint and combined command would be established under the authority of both Canada and the United States, it is believed that this option would be scalable to other countries in the region and would strengthen the broader goals of a unified continental defense and security partnership. The success of this concept would be based on a sustained commitment from both Canada and the United States in support of a unified continental approach for the defense of both nations and a clear delineation of national versus continental issues.

CONCEPT 3: STANDING COMBINED JOINT TASK FORCE RESPONSIBLE TO NATIONAL COMMANDS

This concept (shown in Figure 12) would give primacy to the two national commands: Canada Command and U.S. Northern Command. It would still maintain bi-national capabilities through the establishment of a Standing Combined Joint Task Force

(SCJTF). In practical terms, this SCJTF could be based on NORAD, but would be a supporting command to Canada Command and U.S. Northern Command. The SCJTF would support each national command through the provision of bi-national, all-domain awareness and warning, and where appropriate, a combined and coordinated response to threats and attacks against Canada and the United States. If needed, the SCJTF could respond to incidents or attacks across any domain where a coordinated or combined operation would be desirable.

In addition, Canada Command and U.S. Northern Command would be able to respond unilaterally to natural disasters or terrorist attacks. As such, both countries would maintain the benefits of bi-national cooperation that builds on the successes of NORAD.

Concept 3 would likely receive political support in both Canada and the United States, although the role of NORAD would be clearly diminished. The prominence of national commands might offset the diminished role of NORAD, while the establishment of a SCJTF as the follow-on to NORAD would likely to be popular in both nations. As with the North American Defense Command concept, the SCJTF would be scalable to include other countries in the region. However, considering the primacy given to national commands, an engagement strategy would need to be developed for the deliberate and phased inclusion of other countries in the area of operations.

This concept relies upon the strengths of both national commands and the commitment of these commands towards a continental approach to defense and security.

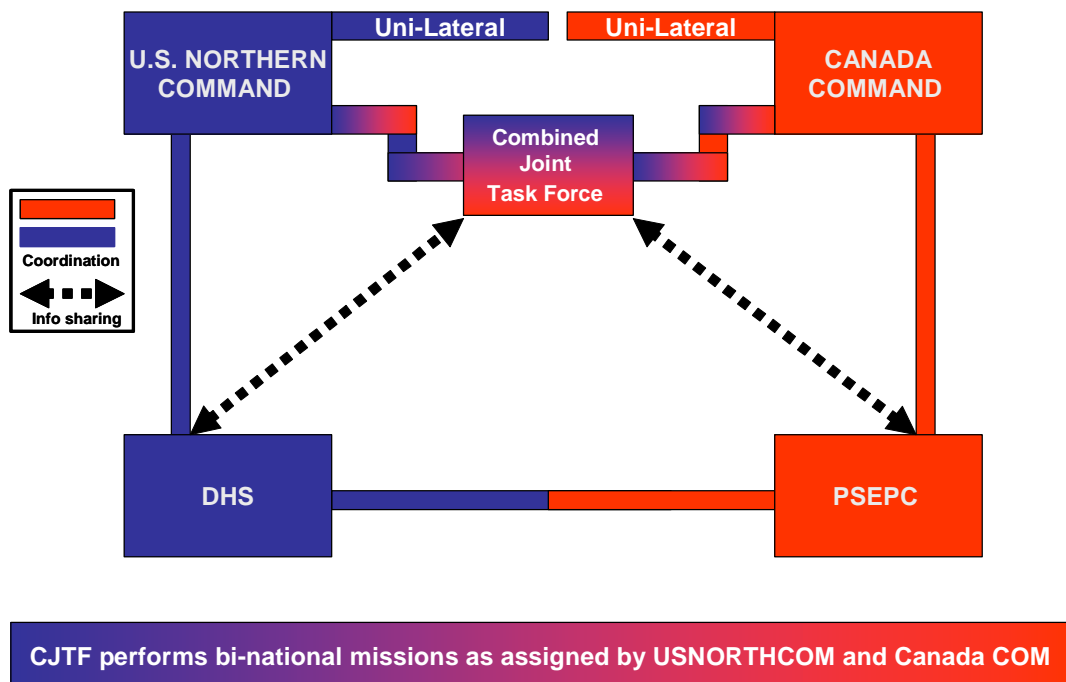


FIGURE 12: CONCEPT 3 – PARALLEL COMMANDS WITH A STANDING COMBINED JOINT TASK FORCE RESPONSIBLE TO NATIONAL COMMANDS

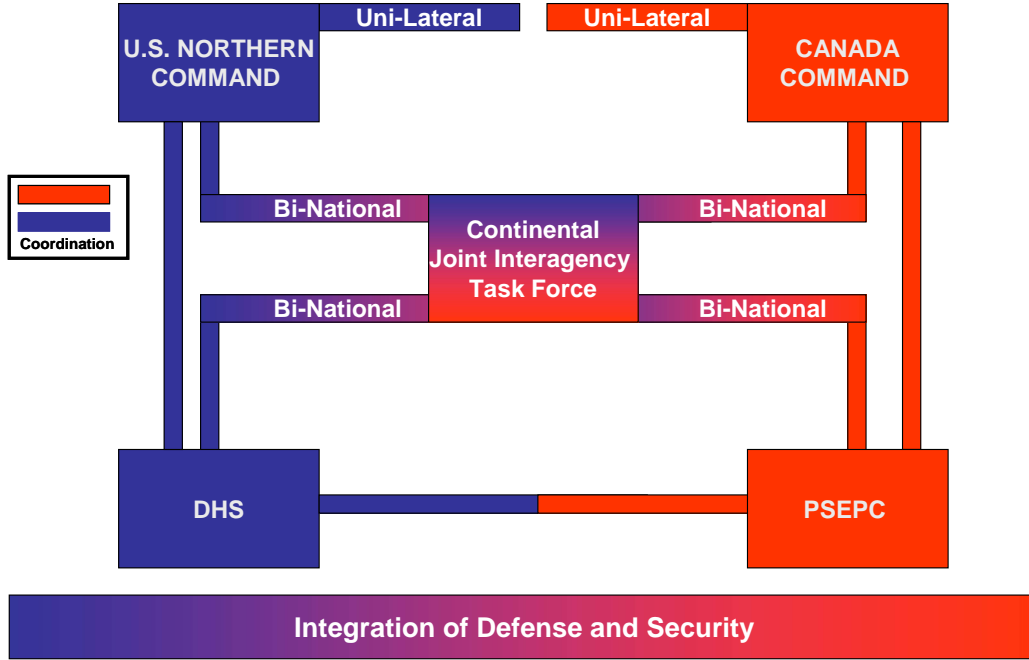


FIGURE 13: CONCEPT 4 - CONTINENTAL JOINT INTERAGENCY TASK FORCE

CONCEPT 4: CONTINENTAL JOINT INTERAGENCY TASK FORCE

This concept would provide a truly integrated approach to continental defense and security through a deliberate melding of defense and security functions. While each nation’s defense and security organizations would remain responsible for unilateral missions in support of their national responsibilities, this concept (see Figure 13) would create a Continental Joint Interagency Task Force (CJITF), which would include defense and security stakeholders from each nation. With an appropriate mandate from both governments, this task force would fuse defense and security information, providing comprehensive continental awareness and threat information to all organizations. A Continental Joint Interagency Task Force could also be responsible for the conduct of bi-national operations where agreed upon by both nations.

For example, this might include aerospace defense, maritime defense and consequence management in support of civil agencies.

Recognizing the need for coordination between CANUS and the inseparable nature of defense and security organizations, this option would improve upon current arrangements by establishing a single organization responsible for all-domain, bi-national warning and execution in the realms of defense and security. This conceptually would significantly enhance the ability to coordinate the response to common threats. It would strengthen cooperation in areas of situational awareness and intelligence sharing, as well as combined and joint planning.

If both nations commit to a comprehensive continental approach, consideration must be given to the complete integration of defense and security into a single CANUS command structure that is responsive to both nations. However, the reality of implementing this concept in the short term (next five to seven years) may prove to be problematic given the newness of some national defense commands and governmental agencies.

Summary

As mentioned earlier, any of the previous concepts presented could be used as a stepping-stone in the interim. The key to the success of this particular option would be both nations commitment to adopt a continental vision for defense and security, which results in an interagency approach to bi-national issues and challenges.

FINAL REPORT CLOSING COMMENTS

The U.S. Quadrennial Defense Review Report identified that “interagency and international combined operations truly are the new Joint operations.”¹⁰⁹ Therefore, throughout this document, the BPG has emphasized the need for a combined vision from the senior leaders of both governments. That combined vision would serve as the catalyst for enhanced coordination among our defense and security organizations. Once this common vision is articulated, these organizations can and will establish a set of intertwined coordination mechanisms, which will in turn enhance the protection of our people. Specifically, the BPG advocates that Foreign Affairs Canada and the U.S. Department of State develop a “Comprehensive Defense and Security Agreement” (CDSA) to be approved by the Prime Minister and the President. This signed agreement would provide the needed political vision, legal authority and overarching guidance for:

- Development of deliberate plans for the joint and combined defense of North America, as well as bi-national civil support
- Conduct of seamless bi-national information sharing
- Development of command, control, communications and computer architectures to support information sharing
- Conduct of joint and combined training and exercises
- Development of coordination mechanisms or agreements among the military stakeholders and the security communities

The recent *NORAD Agreement* renewal negotiations (including a possible expansion of its mandate into the maritime domain) are an important step towards enhancing the defense and security of our continent. To continue this momentum a “Comprehensive Defense and Security Agreement” is the next most important step, as it would bring unity of effort among all defense and security organizations including NORAD,¹¹⁰ and it would shift paradigms and outdated cultures, resulting in newer, more effective plans, policies and procedures. As a result, the people of Canada and the United States, our interdependent economies and our interwoven critical infrastructures will become markedly less vulnerable to man-made threats, and our defense and security organizations will proactively partner to become increasingly effective in response to natural disasters or emergencies.

Without the support of senior civilian and military decision makers from Canada and the United States, it will not be possible to undertake many of the changes outlined in this Report. The ideas, concepts and recommendations presented represent a starting point for such a dialogue. The BPG welcomes other viewpoints and innovative proposals from others that build upon these ideas or provide preferable alternatives.

ENDNOTES

¹ Evolving from the long-standing Canada-United States relationship, the continental approach used throughout this document refers initially to the joint and combined defense and security of the north half of the Western Hemisphere, and maintains an open invitation to participation by other countries. [IAW QDR shift of emphasis: “From separate military Service concepts of operation – to joint and combined Operations” (QDR, page vii)]. Hence, a continental approach does not violate sovereignty or impair the national interests of any country, nor does it preclude bi-lateral agreements. In addition, there are numerous documents of both sides of the border that allude to a continental approach such as: (1) Ogdensburg Agreement (1940). “Created a Permanent Joint Board on Defence ... to conduct studies relating to sea, land, and air problems... (for) the defence of the north half of the Western Hemisphere.” (2) NORAD Agreement (1996 and 2001). “Recent consultations between officials of our two countries have identified those tasks appropriate for the aerospace defense of North America and have analyzed the merits of cooperating in their execution. The analysis has confirmed that binational cooperation enhances aerospace defense for our continent, and is a proven and flexible means to pursue shared goals and interests.” (3) NORAD Terms of Reference (2003) “In the context of NORAD operations and mission articulation, ‘North America’ means Alaska, Canada, Puerto Rico, the United States Virgin Islands, and the continental United States (CONUS), to include the Air Defense Identification Zone.” (4) Joint Statement by Canada and the United States on common security, common prosperity: A new partnership in North America (30 Nov 2004). “Canada and the United States will work to ensure the coherence and effectiveness of our North American security arrangements by: (a) improving the coordination of intelligence-sharing, cross-border law enforcement and counter-terrorism; (b) increasing the security of critical infrastructure, including transportation, energy, and communications networks; (c) working towards renewing the *NORAD Agreement* and investigating opportunities for greater cooperation on North American maritime surveillance and maritime defence” (5) The Security and Prosperity Partnership of North America. (23 March 2005). Through the SPP, the United States, Canada, and Mexico seek to “develop a common security strategy to further secure North America, focusing on: (a) securing North America from external

threats; (b) preventing and responding to threats within North America; and (c) streamlining the secure and efficient movement of legitimate and low-risk traffic across our shared borders.” (6) Canadian National Security Policy (NSP). The Government proposes “working closely with allies, particularly the United States, to continuously improve capacity and coherence in continent-wide emergency management” (p. 27). “Our forces must also be able to defend Canada, help secure North America, and address threats to our national security as far away from our borders as possible” (p.49); and “Canada is committed to strengthening North American security as an important means of enhancing Canadian security” (p. 5). (7) Canadian International Policy Statement (IPS). “Our security, our prosperity, our quality of life—these are all dependent on the success with which we help to manage the North American continent” (p. ii). “To ensure continued prosperity and security, Canada needs a more expansive partnership with both the United States and Mexico that continues to reflect the unique circumstances of our continent” (p. 6). “Today Canada’s regional strategy must be pursued with even greater vigour so that we can realize the aim of a continent where individuals, as well as goods and capital, move freely and realize their common aspirations. In particular, Canada will engage more actively with Mexico, bilaterally and trilaterally, to ensure that the North American Partnership is truly continental in character” (p. 6); and “SECURING THE CONTINENT: Fifteen years after the end of the Cold War the belief that Canada’s territorial security was assured, and that we could somehow reap a “peace dividend,” has been called into question by developments outside and inside our borders” (p. 7). “It is in Canada’s national interest to continue to engage cooperatively with the U.S. on measures that directly affect Canadian territory and citizens, and to maintain our ability to influence how the North American continent is defended” (p. 7). “We will build on the success of the North American Aerospace Defence Command (NORAD), working in the Bi-National Planning Group to find new ways to protect the continent against evolving threats, and pursue priority areas such as maritime security and emergency preparedness... we will continue to act—both alone and with our neighbours—on other defence and security priorities whether on our continent or internationally” (p. 9); (8) Canadian International Policy Statement (IPS)-Defence “We will continue to explore new and innovative ways to enhance relations with the United States to defend

the continent. A strong Canada-U.S. defence partnership remains essential to our security” (p. 2). “The Canadian Forces will protect Canadians at home, work closely with the United States in the defence of the continent, and deploy around the world with our friends and allies as part of a multilateral approach to international problems” (p. 4). “The 2001 attacks on New York and Washington reset the international security agenda. They have also raised the profile of domestic security and the defence of the continent that we share with the United States” (p. 5). “It is clearly in our sovereign interest to continue doing our part in defending the continent with the United States” (p. 21). “NORAD operates a network of ground-based radars, sensors and fighter jets to detect, intercept and, if necessary, engage aerospace threats to the continent” (p. 23). “The Canadian Forces will enhance their role in defending the North American continent by: (a) strengthening their ability to counter threats in Canada, especially in terms of monitoring and controlling activity in the air and maritime approaches to our territory; (b) continuing to contribute Canadian aircraft and other assets to the NORAD mission; (c) ensuring that maritime forces, both regular and reserve, cooperate even more closely with the U.S. Navy and Coast Guard; (d) improving their ability to operate alongside American forces, including through more frequent combined training and exercises; (e) exploring with the United States ways to enhance our bi-national defence cooperation, especially in the areas of maritime security and military support to civilian authorities; and (f) continuing to participate in international operations. “As part of this new approach to continental defence, Canada will also examine greater cooperation with Mexico on security issues” (p. 23). (9) The United States’ National Security Strategy (NSS). “In the Western Hemisphere we have formed flexible coalitions with countries that share our priorities, particularly Mexico, Brazil, Canada, Chile, and Colombia. Together we will promote a truly democratic hemisphere where our integration advances security, prosperity, opportunity, and hope” (p. 10). “There is little of lasting consequence that the United States can accomplish in the world without the sustained cooperation of its allies and friends in Canada and Europe.” (p. 25); (10) U.S. National Strategy for Homeland Security (NSHS). “Finally, we will work closely with Canada and Mexico to increase the security of our shared borders while facilitating commerce within the North American Free Trade Agreement (NAFTA) area” (p. 22). “We need the

help of our closest neighbors—Mexico and Canada—to fully protect our borders” (p. A-3). “We have, for example, made arrangements with Canada and Mexico to improve the security of our shared land borders” (p. 59). (11) U.S. National Military Strategy (2004). “The United States must adopt an “active defense-in-depth” that merges joint force, interagency, international non-governmental organizations, and multinational capabilities in a synergistic manner. This defense does not rely solely on passive measures. The United States must enhance security at home while actively patrolling strategic approaches and extending defensive capabilities well beyond US borders” (p. 5). “To succeed, the Armed Forces must integrate Service capabilities in new and innovative, reduce seams between combatant commands and develop more collaborative relationships with partners at home and abroad” (p. 23). “This mission requires the full integration of all instruments of national power, the cooperation and participation of friends and allies and the support of the American people.” (p. iii); (12) SECDEF Security Cooperation Guidance (SCG) 22 Nov 2005 from US Secretary of Defense provides the following Regional Vision of Continental Defense: “Integrated North American homeland defense efforts providing a comprehensive and mutually beneficial continental defense architecture that effectively protects the homeland” (p. 45). (13) *The National Security Strategy of the United States of America*, dated March 2006, dated March 2006 states that “Our goal remains a hemisphere fully democratic, bound together by good will, security cooperation, and the opportunity for all our citizens to prosper. Countries in the (Western) Hemisphere must be helped to the path of sustained political and economic development. Our strategy for the Hemisphere begins with deepening key relationships with Canada and Mexico, a foundation of shared values and cooperative policies that can be extended throughout the region.” (NSS, 2006, page 37)

² BPG’s *Interim Report on Canada and the United States (CANUS) Enhanced Military Cooperation* (13 October 2004) is available at <http://www.hsdec.org/research.aspx>.

³ Throughout this document, CANUS is merely an acronym, which means “Canada and the United States.” The acronym CANUS is not intended to be an abbreviation of an agreement, region, etc.

⁴ Homeland Defense (HLD). The protection of Canadian or United States sovereignty, territory, domestic population, and critical infrastructure against external threats and aggression or other

threats as directed by the President and/or Prime Minister. The Department of Defense is responsible for homeland defense, which includes missions such as domestic air defense. The Department recognizes that threats planned or inspired by “external” actors may materialize internally. The reference to “external threats” does not limit where or how attacks could be planned and executed. The Department is prepared to conduct homeland defense missions whenever the President, exercising his constitutional authority as Commander in Chief, authorizes military actions. Joint Publication 3-26 (JP 3-26) *Joint Doctrine for Homeland Security* dated 2 August 2005, page GL-9, and approved for inclusion in the next edition of JP 1-02.

⁵ Homeland Security (HLS). Homeland security, as defined in the National Strategy for Homeland Security, is a concerted national effort to prevent terrorist attacks within the United States, reduce America’s vulnerability to terrorism, and minimize the damage and recover from attacks that do occur. The Department of Defense contributes to homeland security through its military missions overseas, homeland defense, and support to civil authorities. Joint Publication 3-26 (JP 3-26) *Joint Doctrine for Homeland Security* dated 2 August 2005, page GL-9, and approved for inclusion in the next edition of JP 1-02.

⁶ Prioritized by *Securing an Open Society: Canada’s National Security Policy*, the *National Security Strategy of the United States of America*, and the U.S. *National Strategy for Homeland Security*, July 2002.

⁷ *Canadian Forces Operations*, B-GJ-005-300/FP-000, Change 2, dated 15 August 2005, emphasizes the coordinated employment of instruments of national power with the “application, or threat, of violence by military force” (page 1-3). Similarly, the United States Joint Publication-1 (JP-1), *Joint Warfare of the Armed Forces*, dated 14 November 2000, and the JP- 3-26, *Homeland Security* dated 2 August 2005, emphasize the need to synchronize and integrate all instruments of national power. JWFC Doctrine Pam 4, *Doctrinal Implications of Operational Net Assessment*, dated 24 February 2004, states that “effects based operations (EBO) are actions that change the state of as system to achieve directed policy aims using the integrated action of the diplomatic, informational, military and economic (DIME) instruments of national power,” obtained 28 November 2005 from: http://www.dtic.mil/doctrine/jwfc_pam.htm. Supports the intent of the Quadrennial Defense Review Report dated 6 Feb 2006, which states,

“The Department of Defense cannot meet today’s complex challenges alone. Success requires unified statecraft: the ability of the U.S. Government to bring to bear all elements of national power at home and to work in close cooperation with allies and partners abroad” (QDR, page 83).

⁸ Supports the QDR observation that “victory can only be achieved through the patient accumulation of quiet successes and the orchestration of all elements of national and international power. But broad cooperation, across the entire U.S. Government, society, and with NATO, other allies, and partners is essential’ (Quadrennial Defense Review Report, dated 6 Feb 2006, page 22). Also, supports the aim of Canada’s International Policy Statement: Defence, which states, “The Government is committed to enhancing Canada’s ability to contribute to international peace and security and, in particular, restore stability in failed and failing states. Achieving this objective in today’s complex security environment will require, more than ever, a “whole of government” approach to international missions, bringing together military and civilian resources in a focused and coherent fashion...and the Canadian Forces will work more closely with other government departments and agencies” (IPS-Defence, page 26).

⁹ In the *Lexus and the Olive Tree*, Thomas Friedman identifies the free flow of information as a key contributor to prospering in a globalized environment.

¹⁰ Civil Support (CS). Defense support to US civil authorities for domestic emergencies, and for designated law enforcement and other activities. Also called CS. (Approved for inclusion in the next edition of JP 1-02.) Per Joint Publication 3-26 (JP 3-26) *Joint Doctrine for Homeland Security* dated 2 August 2005, “defense support of civil authorities” (DSCA) is a new term that is not yet approved for inclusion in DOD policy, therefore civil support is still used as an overarching term. [JP 3-26 page ii]

¹¹ Per Joint Publication 3-26 (JP 3-26) *Joint Doctrine for Homeland Security*, dated 2 August 2005, consequence management is defined as actions taken to maintain or restore essential services and manage and mitigate problems resulting from disasters and catastrophes, including natural, manmade, or terrorist incidents.

¹² Per U.S. National Strategy for Homeland Security, July 2002, the military contributes to homeland security through its missions overseas, homeland defense, and support to civil authorities.

¹³ Joint Publication 3-26 (JP 3-26) *Joint Doctrine for Homeland Security* dated 2 August 2005, page viii.

- ¹⁴ Supported by *Canadian Forces Operations*, B-GJ-005-300/FP-000, Change 2, dated 15 August 2005, which emphasizes, “within the context of national security strategy a nation employs all of its resources” (page 1-4). Also, U.S. Joint Publication 3-16 (JP 3-16) *Joint Doctrine for Multinational Operations*, dated 5 April 2000, states that security is achieved by “directing all the elements of national power (diplomatic, economic, information, military) toward the strategic end state [and] while U.S. forces retain unilateral capability, whenever possible they will seek to operate alongside alliance or coalition forces. (p. 1-3) “When diplomatic, economic and informational means are unable or inappropriate to achieve objectives, the alliance or coalition may decide to conduct large scale, sustained combat operations” (p. 1-5).
- ¹⁵ Speech by Sheryl Kennedy, Deputy Governor of the Bank of Canada, given at the 3rd Annual Montréal-Boston Conference on 4 November 2004. Available at http://economics.about.com/od/canada/a/canada_us.htm.
- ¹⁶ Speech by Jon Allen, Canadian Minister of Political Affairs, 26 October 2004.
- ¹⁷ Osama Bin Laden had pinpointed the economy as the U.S. center of gravity, the source of national power, as reported in an English language transcript translation of the Osama bin Laden interview, dated 21 October 2001 and posted on 23 May 2002 on Qoqaz.net.
- ¹⁸ NAFTA Facts Document, obtained 18 February 2005 from <http://www.mac.doc.gov/nafta/3001.htm>.
- ¹⁹ U.S. Census Bureau, “Trade with Canada,” obtained 15 Mar 2006 from <http://www.census.gov/foreign-trade/balance/c1220.html#2004>.
- ²⁰ US Department of Commerce Fact Sheet, 2003.
- ²¹ Canada’s *International Policy Statement, A Role of Pride and Influence in the World*, released 19 April 2005 and available at <http://www.dfait-maeci.gc.ca/cip-pic/ips/overview-en.asp>. This entry is also on the U.S. Department of State Website obtained on 5 December 2005 at: <http://www.state.gov/r/pa/ei/bgn/2089.htm>.
- ²² Import and export data obtained from <http://www.census.gov/foreign-trade/balance/2004>.
- ²³ The 1996 “Declaration of War” emphasized protecting the Arabic economies and damaging the U.S. economy, stating “if economical boycotting is intertwined with the military operations, defeating the enemy will be even nearer, by Permission of Allah.” *Per* “Declaration of War Against the Americans Occupying the Land of the Two Holy Places,” published on 23 August 1996, in *Al Quds Al Arabi*, a London-based Arabic newspaper.
- ²⁴ House of Commons, Standing Committee on National Defence and Veterans Affairs [SCONDVA] (2002), *Facing Our Responsibilities: State of Readiness of the Canadian Forces: Response to the Terrorist Threat*, November 2001, available at: <http://www.parl.gc.ca/InfoComDoc/37/1/NDVA/Studies/Reports/ndvarp04-e.htm> states that “In the past, the threat to Canada was perhaps not considered as great as what the U.S. faced, but so much of the critical infrastructure of the two countries, including pipelines and power grids, is so intertwined that the security situation in one country affects that of the other” (p 10). Also assessed by Dwight N. Mason, former PJBD Co-Chair, *Managing North American Defense At Home*. From the Proceedings of a Maritime Security Conference 10-12 June 2005, hosted by the Centre for Foreign Policy Studies, Dalhousie University, Halifax, NS. Obtained from www.cfps.dal.ca.
- ²⁵ Canada has extensive oil pipeline connections with the United States. There are two major oil pipeline operators in Canada: Enbridge Pipelines and Terasen. Enbridge operates a 9,000-mile network of pipelines and terminals, delivering oil from Edmonton, Alberta, to eastern Canada and the U.S. Great Lakes region. Terasen operates the Trans Mountain Pipe Line (TMPL), which delivers oil mainly from Alberta west to refineries and terminals in the Vancouver, British Columbia, area. Obtained on 25 April 2005 from Country Analysis, Department of Energy, available at <http://www.eia.doe.gov/emeu/cabs/canada.html>.
- ²⁶ Canada is an important source of the U.S. natural gas supply. In 2003, Canada exported some 3.5 trillion cubic feet (Tcf) of natural gas to the United States, representing 16% of U.S. natural gas consumption in 2003. Most Canadian natural gas exports enter the U.S. through pipelines in Idaho, Montana, North Dakota and Minnesota. Obtained on 25 April 2005 from Country Analysis, Department of Energy, available at <http://www.eia.doe.gov/emeu/cabs/canada.html>.
- ²⁷ Source: Foreign Trade Division, U.S. Census Bureau, Washington, D.C. 20233.
- ²⁸ PenWell *Map Search* data obtained on 8 December-2005 at http://www.mapsearch.com/digital_products.cfm
- ²⁹ Speech by Sheryl Kennedy, Deputy Governor of the Bank of Canada, given at the 3rd Annual Montréal-Boston Conference on 4 November 2004. Available at

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- http://economics.about.com/od/canada/a/canada_us.htm.
- ³⁰ Defense Science Board, *DOD Roles and Missions in Homeland Security, 2003 DSB Summer Study, Volume 1*, November 2003, available at: <http://www.acq.osd.mil/dsb/reports.htm>, page iv identified that we still “lack an effective approach to reaping the benefits of information sharing within and among agencies.” In addition, the Senate, Standing Committee on National Security and Defence. *Canadian Security Guide Book- (2005 EDITION) An Update of Security Problems in Search of Solutions* (December 2004) available at: <http://www.parl.gc.ca/38/1/parlbus/commbus/senate/com-e/defe-e/rep-e/rep03nov04-e.htm> identified that there has been slow progress in information sharing.
- ³¹ *The 9/11 Commission Report, Final Report of the National Commission on Terrorist Attacks upon the United States*, dated 22 July 2004, page 417, available at <http://www.9-11commission.gov/report/index.htm>.
- ³² One of Al-Qaeda’s expectations of the 9/11 attacks was to cause a harsh, widespread domestic crackdown and ending of freedoms in America, including **freedom of information**. In contrast, the media depiction of the 9/11 attacks resulted in non-Muslim world opinion that was sympathetic to the U.S. and favored an Afghan attack, as reported by James S. Robins in “Bin Laden’s War” (2002). Moving from linear to inter-relational information sharing will help preclude another attack.
- ³³ *The 9/11 Commission Report*, page 417, modified from a national to a bi-national recommendation.
- ³⁴ Declaration by the Prime Minister of Canada and the President of the United States of America regarding the establishing of a Permanent Joint Board on Defence made on 18 August 1940 was obtained from: http://www.lexum.umontreal.ca/ca_us/cgi-bin/srch.pl?numhits=25&language=en&method=all&query=Ogdensburg&database=en.
- ³⁵ Joint statement by the governments of Canada and the United States of America regarding defence cooperation between the two countries, made in Ottawa and Washington on 12 February 1947. Available at http://www.lexum.umontreal.ca/ca_us/index_en.html.
- ³⁶ The joint statement by Canadian Prime Minister Paul Martin, U.S. President Bush and Mexican President Vicente Fox on the establishment of the “*Security and Prosperity Partnership of North America*” on 23 March 2005. Available at <http://pm.gc.ca/eng/news.asp?id=443>.
- ³⁷ Joint Statement by President Bush, Prime Minister Martin, and President Fox, March 23, 2005 per White House Fact Sheet.
- ³⁸ Joint Statement by President Bush, Prime Minister Martin, and President Fox, March 23, 2005 per White House Fact Sheet.
- ³⁹ *The National Security Strategy of the United States of America*, dated March 2006, pages 1, 14 and 16.
- ⁴⁰ The *U.S. National Strategy for Homeland Security* aligns and focuses homeland security functions into six critical mission areas: intelligence and warning, border and transportation security, domestic counterterrorism, protecting critical infrastructure, defending against catastrophic terrorism, and emergency preparedness and response. The first three mission areas focus primarily on preventing terrorist attacks; the next two on reducing our Nation’s vulnerabilities; and the final one on minimizing the damage and recovering from attacks that do occur.
- ⁴¹ Senior officials in Public Safety and Emergency Preparedness Canada have stated that it is not a question of “if”, but a question of when, Canada and/or the United States will be attacked again.
- ⁴² Fortress North America was a term used both during the Second World War and more often in the Cold War to refer to the option of defending Canada and the United States against their enemies if the rest of the world were lost to them. It was viewed only as a last-ditch option in case the fascists or communists overran Europe and Asia. In the aftermath of the 9/11 attacks, the idea of Fortress North America has been revived as a strategy of keeping both nations safe from terrorism while keeping the Canada-U.S. border undefended and open to trade. Obtained 5 October 2005 from http://en.wikipedia.org/wiki/Fortress_North_America. Fortress America mentality is also considered to be a reactive stance by the Gilmore Commission Fifth Annual Report, Advisory Panel to Assess Domestic Response Capabilities for Terrorism Involving Weapons of Mass Destruction, V: *Forging America’s New Normalcy – Securing Our Homeland, Preserving Our Liberty*, Fifth Annual Report to the President and the Congress, Washington, D.C., 15 December 2003.
- ⁴³ A key emphasis in BPG analysis is trying to find **systematic** rather than ad-hoc relationships between Canada and the United States, the spirit of which is emphasized in this quote: “When you can measure what you’re speaking about, and express it in numbers, you know something about it; but when
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you cannot measure it, when you cannot express it in numbers, your knowledge is of a meager and unsatisfactory kind. It may be the beginning of knowledge, but you have scarcely in your thoughts advanced to the stage of science.” By Lord Kelvin as reported in *Strategic Outsourcing: A Structured Approach to Outsourcing Decisions and Initiatives*, by, Maurice F Greaver. American Management Association, page 143.

⁴⁴ The systems approach looks at our organizations as a unified, purposeful combination of interrelated parts, requiring leaders to look at the organization as a whole and understand that defense and security activities in either country affect defense and security of all of North America.

⁴⁵ The most critical “values” that Canadians and Americans share are freedom of speech and a democratically elected government. According to the IPSOS-REID Public Opinion Survey prepared for the Canada Institute of the Woodrow Wilson International Center for Scholars and the Canada Institute on North American Issues (May 2005) strong majorities in both countries view the other as friend and ally; majorities like and admire each other; and significant majorities feel “they can say anything they want about the government.” Also see Seymour M. Lipset, *Continental Divide: The Values and Institutions of the United States and Canada*, New York: Routledge, 1990. Also, more recently per 105th American Assembly on “U.S.-Canada Relations,” convened at Arden House in Harriman, New York, on February 3-6, 2005, “*Renewing the U.S. Canada Relationship*” stated “The ‘values’ argument places Canada to the social and political left of the United States. There is a sense of difference over such searing social issues as same-sex marriage, the legalization of marijuana use, abortion, capital punishment and gun control. In addition, there are also long-standing differences over public health issues, levels of taxation, the role and size of government and the relevance of international institutions such as the United Nations. In the early twentieth century, Canada was more conservative than a liberal United States. In the 1930s and 1940s, Canadians would have been astonished to imagine their country as more progressive than the America of Roosevelt’s New Deal and Truman’s Fair Deal. Now, it seems, particularly to Canadians, quite the opposite.” Obtained on 30 November 2005 at: http://www.americanassembly.org/programs.dir/prog_display_ind_pg.php?this_filename_prefix=USCAN&this_ind_prog_pg_filename=report. In contrast to this report, Michael Adam’s study identified

differences between Canadians and Americans in individuality and authority as well as survival and fulfillment; however, his polling data identifies generational differences (e.g. young Canadians are not voting or going to church as their parents did).

⁴⁶ A public opinion survey of Canadians and Americans. An IPSOS-REID report prepared for the Canada Institute of the Washington D.C. based Woodrow-Wilson International Center for Scholars and the Toronto based Canada Institute on North American Issues (CINAI), dated May 2005.

⁴⁷ Joseph R. Nunez. *Parameters (Autumn 2004)*, “Canada’s Global Role: A Strategic Assessment of its Military Power” that “Canada generally worships at the United Nations altar, whereas the United States is skeptical about the United Nations’ ability to provide timely and sound handling of global problems” (page 75).

⁴⁸ The geographic combatant commanders include Commander, U.S. Northern Command, U.S. Southern Command, U.S. Pacific Command, U.S. European Command and U.S. Central Command. (NORTHCOM, SOUTHCOM, PACOM, EUCOM and CENTCOM).

⁴⁹ “The Department must also adopt a model of continuous change and reassessment if it is to defeat highly adaptive adversaries” (QDR, page 1).

⁵⁰ “The United States will not win the war on terrorism or achieve other crucial national security objectives discussed in this Report by military means alone. Instead, the application of unified statecraft, at the Federal level and in concert with allies and international partners, is critical” (Quadrennial Defense Review Report, dated 6 Feb 2006, page 92).

⁵¹ The joint statement by former Prime Minister Paul Martin, U.S. President Bush and Mexican President Vicente Fox on the establishment of the “*Security and Prosperity Partnership of North America*” on 23 March 2005. Available at <http://pm.gc.ca/eng/news.asp?id=443>.

⁵² This continental approach is reinforced by the U.S. Secretary of Defense in the *Security Cooperation Guidance* (22 November 2005), which states this vision: “Continental Defense: Integrated North American homeland defense efforts providing a comprehensive and mutually beneficial continental defense architecture that effectively protects the homeland.” (SCG, 2005, page 45)

⁵³ The 9/11 Commission Report goes into detail about information sharing gaps that contributed to the success of the attacks on September 11th, 2001. The Report identified that “day-to-day gaps in information sharing can emerge even when there is

mutual good will.” (page 267). Obtained from: <http://www.gpoaccess.gov/911>. *Annual Report to Congress on Combating Terrorism*, pursuant to Fiscal Year 1998 National Defense Authorization Act (Public Law 105-85), June 24, 2002, from: www.whitehouse.gov/omb/legislative/combating_terrorism06-2002.pdf identified that “Uncovering terrorist operations before they are conducted requires information sharing among allies.” While the 9/11 Commission Report is U.S. specific, *The Commission on the Intelligence Capabilities of the United States*. Report to the President of the United States Regarding Weapons of Mass Destruction. 31 March 2005, available at:

<http://www.wmd.gov/report/>, found that the WMD information sharing problem manifested itself in three specific ways, intelligence was not passed “(1) from the collectors to the analysts; (2) from the analysts to the collectors; and (3) from foreign liaison services to the Intelligence Community. The lack of an effective system for information sharing between collectors and analysts is a well-known systemic problem, but one that has proven highly resistant to resolution” (page 177).

⁵⁴ Eliminating gaps through systematic protocols is a key focus of the BPG Report because, “based on the demonstrated ease with which uncooperative states and non-state actors can conceal WMD programs and related activities, the United States, its allies and partners must expect further intelligence gaps and surprises” (Quadrennial Defense Review Report dated 6 Feb 2006, page 33).

⁵⁵ Linking involves designing formal and informal structures and processes to connect and coordinate organizational units and subunits whose tasks are interdependent, but are separated by strategic grouping decisions. Michael Tushman, *Competing By Design: The Power of Organizational Architecture*. (Oxford University Press, 1997.)

⁵⁶ For a list, see GAO-04-591, *Selected Recommendations from Congressionally Chartered Commissions and GAO*, at www.gao.gov/cgi-bin/getrpt?GAO-04-591.

⁵⁷ Strategic functions as defined in Department of Defense Directive 5100.1 dated 25 Sep 1987 and the CJCSM 3500.04C Universal Joint Task List (UJTL) dated 1 July 2002.

⁵⁸ A critical lesson from the BPG is that Canadians and Americans working side-by-side is significantly more effective than corresponding between distant headquarters such as SJS/NDHQ and US Joint Staff. See Dr. Bernard Stancati, (2005). *Pushing a Binational Strategic Alliance Rope Up a Hill: An Empirical Assessment of How Competing*

Objectives Can Affect the Actual Outcome of a Strategic Alliance (D.M. diss., Colorado Technical University). “Studies have shown that the problems associated with strategic alliance management are wide and varied, and include such factors as: a) cultural clashes and incompatible partner chemistry; b) lack of trust among the principle partners; c) lack of clearly stated goals, objectives and vision; d) lack of coordination amongst management teams; e) differences in operating attitudes and procedures; f) lack of commitment to the alliance; g) the high level of downside risk; (in) headquarters such as NDHQ (SJS) and US Joint Staff.” (page 267)

⁵⁹ “All plans have a limited period of validity due to the changing circumstances upon which they were based. Plans and associated SUPLANs must be reviewed at least every 24 months,” B-GJ-005-500/FP-000 *Canadian Forces Operational Planning Process (CF OPP)*, page 5-5 and per JFSC Pub 1, page 4-5. Strategic planning must be conducted to update CANUS plans for HLD and HLS. A meta-analysis of over 200 empirical studies, concluded that leaders must provide input and/or guidance to strategic planning influencing process, human resources and knowledge management, analysis, measurement and information flows, etc., which then influence outcomes and results. See Dr. B. L. Baker. (2004) *TQM Practice and Theory: A Meta-Analysis of Empirical Studies*. Dissertation Abstracts International, Vol. 65 Issue 1A, page 206. Publisher is PROQUEST Information and Learning (formerly UMI), Ann Arbor Michigan 48106. Publication #3117237, see pages 135-238.

⁶⁰ Supported by panel of experts at the *Canada – U.S. Partnership, Enhancing Our Common Security* Workshop. Hosted by the Institute for Foreign Policy Analysis (IFPA) and the Fletcher School, Tufts University, on 14 March 2005, page 5. Obtained from: <http://www.ifpa.org/pdf/Canada-US-Report.pdf>. In addition, “experience from recent operations, supported by the findings and recommendations in the 2001 QDR and a number of studies and commissions chartered by the Congress and the President – including those on national security space management, remote sensing, weapons of mass destruction and terrorism – have underscored the increasingly critical role that intelligence capabilities, including those in space, play in supporting military operations, policy and planning and acquisition decisions in the Department” (QDR, page 56).

⁶¹ As an example of progress, the U.S. Homeland Security Information Act (Sec. 891) “Expresses the sense of Congress that federal, state and local

entities should share homeland security information to the maximum extent practicable.” However, this U.S. Law did not extend the same caveats to our northern and southern neighbors.

⁶² The U.S. *National Strategy to Secure Cyberspace*, dated February 2003, states “To facilitate real-time sharing of the threat information as it comes to light, the United States will foster the establishment of an international network capable of receiving, assessing, and disseminating this information globally” (page 51) and that “The United States will work with Canada and Mexico to make North America a ‘Safe Cyber Zone.’ We will expand programs to identify and secure critical common networks that underpin telecommunications, energy, transportation, banking and finance systems, emergency services, food, public health, and water systems” (page 51).

⁶³ The Council on Foreign Relations, *Building a North American Community*, Independent Task Force Report No. 53, page 11 supports similar tri-lateral sharing between Canada, Mexico and the United States.

⁶⁴ *North American Defense and Security after 9/11*, Joint Forces Quarterly, Issue 40, 1st Quarter 2006, page 26.

⁶⁵ The DOD Directive 5530.3, defines international agreements as “an instrument with a foreign government or an international organization, that is denominated as an international agreement or as a memorandum of understanding, memorandum of agreement, memorandum of agreements, exchange of notes, exchange of letters, technical arrangement, protocol, note verbal, aide memoire, agreed minute, contract, arrangement, statement of intent, letter of intent, statement of understanding or any other name connoting a similar legal consequence” (para E2.1.1.1.3).

⁶⁶ This recommendation supports the intent found in the *National Intelligence Strategy of the United States of America, Transformation Through Integration and Innovation* (page 15), dated October 2005, and located at: http://www.globalsecurity.org/intell/library/policy/national/nis-usa_october2005.pdf. It also supports the recommendation in *The Report to the President of the United States by the Commission on the Intelligence Capabilities of the United States Regarding Weapons of Mass Destruction*, dated 31 March 2005, and located at: <http://www.wmd.gov/report/>. In addition it supports the *Quadrennial Defense Review Report* dated February 6, 2006, pages 51, 58 and 59.

⁶⁷ This supports the Defense Science Board, *DOD Roles and Missions in Homeland Security, 2003 DSB Summer Study, Volume II-B, Information, Sharing and Analysis Panel Report*, September 2004, which states, “Information is vital to homeland security. In general, foreign intelligence collection must be more proactive and better integrated with domestically derived intelligence.” (Page i), obtained from <http://www.acq.osd.mil/dsb/reports.htm>.

⁶⁸ The GRIFFIN network bridge eliminates a need for individual/local guarding systems. It provides a classified electronic information-sharing environment fostering collaborative planning activities between the participating nation’s strategic, operational and tactical level Headquarters. It enhances a five-nation network including: 1) Australia (Defence Secret Network), 2) Canada (TITAN), 3) New Zealand (Secure Wide Area Network), 4) United Kingdom (Secret LAN Interconnect), and 5) United States (SIPRNET).

⁶⁹ “Interoperability” refers to (1) the ability of systems, units, or forces to provide and accept data, information, materiel, and services to and from other systems, units, or forces and to interoperate with other U.S. Forces and Canadian partners effectively; and (2) the condition achieved among communications-electronics systems or items of communications-electronics equipment when information or services can be exchanged directly and satisfactorily between them and/or their users. Non-Compliance, or inadequate compliance with interoperability capabilities, increases the likelihood that C3I/C4I systems will not be interoperable, thereby putting lives, expensive equipment, and the success of Joint and Combined Operations at risk.

⁷⁰ Network-Centric Warfare (NCW) is an emerging theory of war in the Information Age. It is also a concept that, at the highest level, constitutes the military’s response to the Information Age. The term “network-centric warfare” (NCW) broadly describes the combination of strategies, emerging tactics, techniques and procedures, and organizations that a fully or even a partially networked force can employ to create a decisive warfighting advantage. A networked force conducting Network-Centric Operations (NCO) is an essential enabler for the conduct of effects-based operations (EBO), which are sets of actions directed at shaping the behavior of friends, neutrals, and foes in peace crisis and war.

⁷¹ This key recommendation supports the Joint Command and Control Vision in the *Quadrennial Defense Review Report*, dated 6 Feb 2006, which states, “the joint force of the future will have more

robust and coherent joint command and control capabilities. Rapidly deployable, standing joint task force headquarters will be available to the Combatant Commanders in greater numbers to meet the range of potential contingencies. These headquarters will enable the real-time synthesis of operations and intelligence functions and processes, increasing joint force adaptability and speed of action. The joint headquarters will have better information, processes and tools to design and conduct network-enabled operations with other agencies and with international partners” (QDR, page 59).

⁷² According to the *U.S. National Strategy to Secure Cyberspace*, dated February 2003, “The United States will work with Canada and Mexico to make North America a ‘Safe Cyber Zone.’ We will expand programs to identify and secure critical common networks that underpin telecommunications, energy, transportation, banking and finance systems, emergency services, food, public health, and water systems” (page 51).

⁷³ Terms of Reference (TOR) for the BPG, dated 24 Aug 03, are in Appendix A of this Report.

⁷⁴ Joint is defined as more than one service, and combined is between two or more forces or agencies of two or more allies. Joint Publication 1-02, *DOD Dictionary of Military and Associated Terms*, obtained 1 Nov 2005 from: <http://www.dtic.mil/doctrine/jel/doddict/index.html>.

⁷⁵ The US and Canada participate in the RIMPAC series of naval exercises every two years. Those exercises take place in Pacific Rim countries and have naval, air and army personnel from the US, Canada, the UK, Australia, the ROK, Chile [and others. Nevertheless, the exercise is not specifically focused upon CANUS Homeland Defense and Security for North America, nor has it focused upon implementation and feedback into the CANUS LANDOP, MAREASTOP, MARWESTOP, or the inter-operability with NORAD CONPLAN. Hence, while the joint and combined RIMPAC series of exercises are commendable, systematically they don’t do enough in a CANUS HLD/HLS context.

⁷⁶ Per Joint Publication 3-26 (JP 3-26) Joint Doctrine for Homeland Security dated 2 August 2005, “defense support of civil authorities” (DSCA) is a new term that is not yet approved for inclusion in DOD policy, therefore BPG uses civil support as an overarching term. [JP 3-26 page ii]

⁷⁷ U.S. Government Accountability Office, GAO-05-548: *Military Training*, June 2005, identified that in Operation Iraqi Freedom, many U.S. forces had to be given some level of basic joint operations

training after they had already entered the Iraqi theater of war, because they were experiencing joint operations for the first time. Available at www.gao.gov/cgi-bin/getrpt?GAO-05-548.

⁷⁸ This concept is supported by 2004 *DOD Training Transformation Implementation Plan*—Appendix 1, Item 4.7.3, page AP1-122. Available at http://www.t2net.org/strategic_impl_plans.htm.

This task is dependent on the participation of Canadian and U.S. Federal agencies for interagency tasks, the full activation of HQ Canada Command for intergovernmental tasks, and the cooperation of both militaries (and possibly members of the NATO Alliance) for multinational tasks.

⁷⁹ Annual Report of the Chief of the Defence Staff, 2002-2003, *A Time for Transformation*, page 4-5, and the CF Strategic Collective Training Plan (SCTG) 2004, page 5/8. Also supports the supports the Quadrennial Defense Review Report dated February 6, 2006, page 37.

⁸⁰ Supports the aim of Canada’s *International Policy Statement: Defence* that states, “the Canadian Forces will enhance their role in defending the North American continent by ... improving their ability to operate alongside American forces, including through more frequent combined training and exercises” (IPS-Defence, page 23). This key recommendation also supports the intent of the U.S. *Quadrennial Defense Review Report* dated 6 Feb 2006 that says DOD “seeks to improve the homeland defense and consequence management capabilities of its national and international partners and to improve the Department’s capabilities by sharing information, expertise and technology as appropriate across military and civilian boundaries. [DOD] does this by leveraging its comparative advantages in planning, training, command and control and exercising and by developing trust and confidence through shared training and exercises. Successful homeland defense requires standardizing operational concepts, developing compatible technology solutions and coordinating planning. Toward that end, the [DOD] will work with the Department of Homeland Security and with state and local governments to improve homeland security capabilities and cooperation. Working together will improve interagency planning and scenario development and enhance interoperability through experimentation, testing and training exercises” (QDR, page 27).

⁸¹ This BPG recommendation supports key recommendations identified by the North American Security Cooperation Assessment (NASCA): “The United States and Canada should increase the

transparency of the process by which they engage in bi-lateral defence negotiations, policy development, and operations; This process should include a focus on public understanding and involvement; Projects undertaken by academic institutions, and other civilian research organizations should be supported, particularly as means of generating transparency in, and awareness about, the defence planning process.” The NASCA report was prepared by members of the University of British Columbia (UBC)

International Relations Students Association (IRSA) in 2005, and their observations were compiled by Milan Ilnyckyj-obtained from <http://www.irsa.ca>.

⁸² This supports the QDR recommendation to “implement Adaptive Planning across the Department by increasing the number of fully qualified planners, investing in advanced planning toolsets, and organizing planning staffs to exploit the advantages that new technology and highly trained, experienced planners provide” (QDR, p 60).

⁸³ Supports the aim of *Canada’s International Policy Statement: Defence* transformation aim, which “will require the Canadian Forces to ... continue to invest in people. For transformation to be successful, our military personnel must possess the skills and knowledge to function in complex environments” (IPS-Defence, page 12).

⁸⁴ BPG TOR is at Appendix A, see paragraph 5.g.

⁸⁵ Supported by recommendation found in the Gilmore Commission Third Annual Report, *Advisory Panel to Assess Domestic Response Capabilities for Terrorism Involving Weapons of Mass Destruction, III. For Ray Downey*, Third Annual Report to the President and the Congress, Washington, D.C., December 15, 2001, stating “We recommend that the U.S. Government negotiate more comprehensive treaties and agreements for combating terrorism with Canada and Mexico,” page 40, obtained Nov-29-05 at <http://www.rand.org/nsrd/terrpanel>

⁸⁶ This key recommendation supports the need identified in the Quadrennial Defense Review Report dated 6 Feb 2006 for: “security cooperation and engagement activities including joint training exercises, senior staff talks, and officer and foreign internal defense training to increase understanding, strengthen allies and partners, and accurately communicate U.S. objectives and intent. This will require both new (CANUS) authorities and 21st century mechanisms for the interagency process” (QDR, page 31-32).

⁸⁷ The U.S. Quadrennial Defense Review Report dated 6 Feb 2006 identified “the prospect that a nuclear-capable state may lose control of some of its weapons to terrorists is one of the greatest dangers

the United States and its allies face” (QDR, page 32), it proposed four key initiatives related to WMD: (1) “Defend the Homeland— contribute to the nation’s response to and management of the consequences of WMD attacks or a catastrophic event, such as Hurricane Katrina, and also to raise the level of defense responsiveness in all domains (e.g., air, land, maritime, space and cyberspace) if directed” (QDR, page 37); (2) “To achieve the characteristics of the future joint force and build on progress to date, the Department will: Expand the Army’s 20th Support Command (CBRNE) capabilities to enable it to serve as a Joint Task Force capable of rapid deployment to command and control WMD elimination and site exploitation missions by 2007” (QDR, page 52); (3) “The Department will also establish a deployable Joint Task Force headquarters for WMD elimination to be able to provide immediate command and control of forces for executing those missions” (QDR, page 6); (4) “Finally, if a WMD attack cannot be prevented, the Department must be prepared to respond to requests to help mitigate the effects of the attack at the earliest opportunity, initiate or support ongoing consequence management efforts, and actively support local, state, Federal and allied and partner authorities. To ensure that its responses to the new WMD threat are considered both credible and legitimate, the United States will work closely with its partners, allies, and other members of the international community” (QDR, page 34). Supports *Canada’s International Policy Statement: Defence* that states “Canadian Forces will expand the Joint Nuclear, Biological and Chemical Defence Company to better protect Canadians at home as well as Canadian Forces units deployed on domestic and international operations” (IPS-Defence, page 13). In addition to these initiatives, the BPG asserts that cross border operations by WMD-CST or (vice versa) the Canadian Forces NBC Coy is critical to defense of our two nations. Providing the ability of WMD-CSTs to cross into Canada or Mexico is also supported by the honorable Paul McHale, Assistant Secretary of Defense for Homeland Defense, during the hearing on DOD Role in HLD and Support to Civil Authorities by the Emerging Threats and Capabilities Sub-Committee of the Senate Armed Services Committee, held on 10 March 2006.

⁸⁸ A historic precedent is the deployment of U.S. radiological teams to assist in the clean-up of radiological material as a result of the crash of the COSMOS 954 in the Northwest Territories in 1978.

⁸⁹ Per the North Atlantic Treaty, the militaries of both nations must plan for and be able to simultaneously

defend Canada and the United States. Other key missions from the Homeland Defense (HLD) and Civil Support (CS) Joint Operating Concept (JOC) also apply: “to, provide support to civil authorities as directed, and help prepare for emergencies. HLD operations ensure the integrity and security of the Homeland by detecting, deterring, preventing, and defeating external threats and aggression as early and as far from US borders as possible. Mission sets for HLD include: (1) Air and Space Defense, (2) Land Defense, (3) Maritime Defense, and (4) Cyber Defense. In addition, DOD may also be directed to support other agencies with capabilities unique to DOD that can be used to mitigate and manage the consequences of natural or man-made disasters, including chemical, biological, radiological, nuclear, or high-yield explosive (CBRNE) events. Mission sets for CS include: (1) Military Assistance to Civil Authorities (MACA), sometimes referred to as Defense Support of Civil Authorities (DSCA), (2) Military Support to Civilian Law Enforcement Agencies (MSCLEA), and (3) Military Assistance for Civil Disturbances (MACDIS). Canadian Forces use somewhat different terminology, but have a similar focus.

⁹⁰ As an enterprise asset, the collection and dissemination of information should be managed by portfolios of capabilities that cut across legacy stove-piped systems” (Quadrennial Defense Review Report dated 6 Feb 2006, page 58).

⁹¹ This concept was discussed at the PJBD meeting in October 2005 and in March 2006, but has not yet been fully implemented.

⁹² The United States refer to the Army, Navy, Air Force and Marines as “Services; Canadians call them “environments” with similar context.

⁹³ Dwight Mason, “Canada and the Future of Continental Defense,” *Policy Papers on the Americas*, Vol. XIV, (Washington: Center for Strategic and International Studies, September 2003), pp. 1-2.

⁹⁴ The Ogdensburg Declaration created the PJBD, which is charged with advice on the land, sea, and aerospace defense issues for the Northern American Continent. Per Ben Rowswell, “Ogdensburg Revisited. Adapting Canada-U.S. Security Cooperation to the New International Era.” *CSIS. Policy Papers on the Americas*. Vol. XV, Study 5 (May 2004), pp. 3-4.

⁹⁵ The MCC was established by the PJBD in 1946 as the senior military advisory body with the role of managing cooperation at the strategic military planning level for the defense of North America. It

provided the primary military staff linkage between Canada and the United States.

⁹⁶ The North American Air Defense Command (NORAD) was created in 1958 to protect the North American continent against strategic air threats. In 1981, NORAD was renamed the North American Aerospace Defense Command. See Ben Rowswell, *Ogdensburg Revisited*, pp. 4-5.

⁹⁷ NORAD Mission: NORAD continuously provides worldwide detection, validation and warning of an aerospace attack on North America and maintains continental aerospace control, to include peacetime air sovereignty alert and appropriate aerospace defense measures in response to hostile actions against North America. Obtained on 10 Jan 06, at <https://www.noradnorthcom.mil/Lists/NORAD%20USNORTHCOM%20Mission/AllItems.htm>.

⁹⁸ FBI Mission states, “to protect and defend the United States against terrorist and foreign intelligence threats and to enforce the criminal laws of the United States.” Obtained on 10 Jan 06, at: <http://www.fbi.gov/hq.htm>.

⁹⁹ DHS created by the *Homeland Security Act of 2002* to prevent terrorist attacks within the United States, reduce America’s vulnerability to terrorism, and minimize the damage from potential attacks and natural disasters. “What is the Mission of the New Department of Homeland Security?” Obtained on 10 Jan 06, at DHS Website at (<http://www.dhs.gov/dhspublic/display?theme=10&content=429>) and

<http://www.dhs.gov/dhspublic/display?theme=10>

¹⁰⁰ Public Safety and Emergency Preparedness Canada (PSEPC) is Canada’s lead department for public safety. “PSEPC builds and implements national policies for emergency management and national security; helps ensure community safety by delivering crime prevention programs and developing federal policies for law enforcement and corrections.” Obtained on 10 Jan 06, at <http://www.PSEPC-sppcc.gc.ca/index-en.asp>.

¹⁰¹ Reporting directly to the CDS, the Commander of CANADA COMMAND will be responsible for the conduct of all domestic operations – routine and contingency -- and will be the national operational authority for the defence of Canada and North America on 1 Feb2006. Obtained 10 Jan 06, at http://www.forces.gc.ca/site/Newsroom/view_news_e.asp?id=1692.

¹⁰² NORTHCOM Mission: “Conducts operations to deter, prevent, and defeat threats and aggression aimed at the United States, its territories, and interests within the assigned area of responsibility; as directed by the President or Secretary of Defense,

provides military assistance to civil authorities including consequence management operations.”

Obtained on 10 Jan 06, at

<https://www.noradnorthcom.mil/Lists/NORAD%20USNORTHCOM%20Mission/AllItems.htm>.

¹⁰³ Strategic functions as defined in Department of Defense Directive 5100.1, dated 25 Sep 1987, and the CJCSM 3500.04C Universal Joint Task List (UJTL), dated 1 July 2002.

¹⁰⁴ MCC TOR, dated 13 January 2006, identifies the following mission: “The mission of the MCC is to provide the primary strategic staff link between the Canadian and U.S. joint staffs for the purpose of considering issues and making recommendations on combined strategic military policy, plans, operations, and opportunities for enhanced military cooperation.” The primary focus of the MCC is at the strategic level, addressing issues of global and bilateral consequence. The MCC will monitor force generation, force employment, and force development issues across the spectrum of military cooperation and will promote substantive joint staff, service, and operational-level/combatant command issues to senior fora such as Armed Forces Council-Joint Chiefs of Staff (AFC-JCS) Talks.

¹⁰⁵ CJCSM 3500.04C Universal Joint Task List (UJTL), dated 1 July 2002, identifies Strategic-National, Strategic-Theater, Operational, and Tactical levels of war. See page B-A-3 to B-A-6. The North American Theater requires US Northern Command and Canada Command to operate at the Strategic-Theater level, but plan for the operational level. In addition, the new threat environment may have tactical level events that could have strategic consequences.

¹⁰⁶ USNORTHCOM provides defense support of civil authorities primarily through their subordinate commands: Joint Task Force Civil Support at Fort Monroe, Virginia; Joint Force Headquarters National Capital Region at Fort McNair, Washington D.C.; Joint Task Force Alaska at Elmendorf Air Force Base and Joint Task Force North (JTF-N) at Fort Bliss, Texas. Also, the U.S. Army, Air Force and Marine Corps have established dedicated Service Components for USNORTHCOM to include: Army-North located at Fort Sam Houston, Texas; Air Force-North located at Tyndall Air Force Base, Florida and Marine Forces-North located in New Orleans, Louisiana. Commander Fleet Forces Command, located at Naval Station Norfolk, Virginia is designated as the Navy’s Supporting Commander to USNORTHCOM.

¹⁰⁷ Chapter 5 of the *BPG Interim Report* dedicated considerable attention to future levels of CANUS

defense cooperation, with particular emphasis on the mutual benefits of enhancing intelligence and information sharing across all domains. While it is not the intent of this chapter to repeat the level of discussion and analysis provided in the *BPG Interim Report*, Chapter 7 provides a different perspective to the enhanced levels of cooperation given the changes that have taken place in the interim, most notably, the creation of Canada Command. It is important, however, to reinforce the preliminary conclusions that were outlined in the *BPG Interim Report*: “situational awareness, information sharing, operational and intelligence planning must be conducted in a joint and combined environment.”

¹⁰⁸ BPG identifies potential seams and gaps when no information sharing agreement is in place, or when there is little evidence of a systematic approach. The *9/11 Commission Report* goes into detail about information sharing gaps that contributed to the success of the attacks on September 11th, 2001. The Report identified that “day-to-day gaps in information sharing can emerge even when there is mutual good will” (page 267). Obtained from: <http://www.gpoaccess.gov/911>, *The Annual Report to Congress on Combating Terrorism*, pursuant to Fiscal Year 1998 National Defense Authorization Act (Public Law 105-85), June 24, 2002, obtained at www.whitehouse.gov/omb/legislative/combating_terrorism06-2002.pdf, identified that “Uncovering terrorist operations before they are conducted requires information sharing among allies.” While the *9/11 Commission Report* is U.S. specific, *The Commission on the Intelligence Capabilities of the United States Regarding Weapons of Mass Destruction*. 31 March 2005, available at:

<http://www.wmd.gov/report>, found that the WMD information sharing problem manifested itself in three specific ways: intelligence was not passed “(1) from the collectors to the analysts; (2) from the analysts to the collectors; and (3) from foreign liaison services to the Intelligence Community. The lack of an effective system for information sharing between collectors and analysts is a well-known systemic problem, but one that has proven highly resistant to resolution” (page 177).

¹⁰⁹ *Quadrennial Defense Review Report* dated 6 Feb 2006, page 83.

¹¹⁰ The *Quadrennial Defense Review Report* dated 6 Feb 2006 states that the military cannot meet today’s complex challenges alone. Within the United States, the QDR calls for integrating federal state and local capabilities, and helping enable other agencies. Internationally, the QDR calls for

strengthening long standing alliances; helping to build the capacity of new partners; and refining U.S. authorities for greater flexibility in partnerships. Similarly, This also supports Canada's International Policy Statement: Defence aim to, "improve coordination with other government departments and interoperability with allied forces, particularly the United States, through smart investments in evolving technology and doctrinal concepts, training opportunities, and exchange and liaison programs" (IPS-Defence, page 12).

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APPENDIX A: TERMS OF REFERENCE (TOR) FOR THE BI-NATIONAL PLANNING GROUP (BPG), 24 AUGUST 2003

1. The BPG was established through an exchange of Diplomatic Notes signed by the Canadian Minister of Foreign Affairs and the United States Secretary of State on 3 and 5 December 2002, respectively. This exchange of notes constitutes an agreement between the Governments of Canada and the United States and will remain in effect for a period of 2 years, during which its terms may be reviewed at any time at the request of either Government. This agreement may be terminated by either Government or extended by agreement of both Governments, following 3 months' written notice.

2. These TOR constitute the Canadian Chief of the Defence Staff (CDS) and Chairman of the Joint Chiefs of Staff (CJCS) direction to the head of the BPG. They serve to supplement the BPG agreement by clarifying and delineating, where necessary, military responsibilities directed or implied by the agreement. Changes to these TOR, which can be initiated at any time, must be staffed through the Military Cooperation Committee (MCC) for approval by the CJCS and the CDS, or higher authority, as appropriate. These TOR, and any subsequent changes, shall be consistent with the principles set forth in the BPG agreement and do not restrict the terms contained in the BPG agreement.

3. The terrorist attacks of 11 September 2001 represented a dramatic change in the geostrategic environment for North American security. The overall threat to North America from the air, land and sea has greatly increased, including the potential for the use of weapons of mass destruction delivered by unconventional means. To counter this threat, the governments are convinced that close military cooperation, as detailed herein, conducted within the framework of the North Atlantic Treaty Organization (NATO), remains vital to their mutual security, compatible with their national interests and an important element of their contribution to the overall security of the NATO area.

4. Both Canada and the United States view the continued participation in the current North American Aerospace Defense Command (NORAD) Agreement as critical for the aerospace defense of North America. Both governments also affirm the merits of broadening bi-national defense arrangements to:

a. Prevent or mitigate attacks or threats by terrorists or others on Canada or the United States; and

b. Ensure a cooperative and well-coordinated response to national requests for military assistance in relation to terrorist, or other, threats or attacks, natural disasters or other major emergencies in Canada or the United States.

5. The BPG is tasked to develop detailed bi-national maritime, land and civil support contingency plans and decision-making arrangements in the event that threats, attacks, incidents, or emergency circumstances require bi-national military or civil/military responses to maintain the security of Canada or the United States. To implement these requirements, the BPG shall:

a. Conduct reviews of all existing Canada-U.S. defense plans (to include the Basic Security Document and the Combined Defense Plan) and military assistance protocols with a view toward improving North American land and maritime defense as well as potential new mechanisms for improving military support to civil agencies in times of major emergencies in both Canada and the U.S.;

b. Prepare bi-national contingency plans to respond to threats and attacks, and other major emergencies in Canada or the United States, in accordance with the U.S. Joint Operation Planning and Execution System and the Canadian Forces Operational Planning Process;

c. Maintain awareness of emerging situations through maritime surveillance activities. Share intelligence and operational information in accordance with national laws, policies, and directives under the auspices of intelligence arrangements between Department of Defense and NDHQ. This shall include assessment of maritime threats, incidents, and emergencies to advise and/or warn Governments.

(1) The BPG will focus its maritime assessments and warnings to those threats (real or perceived), which could affect both the United States and Canada collectively. This is not meant to limit the flow of information between the two countries under existing or future agreements.

(2) The BPG shall develop mechanisms and protocols to advise and/or warn both Governments.

d. Design and participate in exercises;

e. Plan and participate in joint training programs;

f. Validate plans prior to approval; and

g. Establish appropriate coordination mechanisms with relevant Canadian and U.S. federal agencies. BPG interactions with U.S. civilian agencies shall be coordinated through the Office of the Secretary of Defense via the Joint Staff Strategic Plans and Policy Directorate (J-5). Interaction with Canadian civilian agencies shall be coordinated through the Deputy Chief of Defence Staff.

6. In addition to any personnel assigned specifically to the BPG by each nation, NORAD can provide personnel to work in the BPG as dual-hatted NORAD/BPG personnel. US Northern Command (USNORTHCOM) can provide personnel to work in the BPG as dual-hatted USNORTHCOM/BPG personnel. The BPG may be further assisted with technical expertise and/or support provided by either NORAD or USNORTHCOM through their dual-hatted personnel.

7. All provisions in the NORAD Agreement (and its supporting documents including the current NATO Status of Forces Agreement) concerning the administration, discipline, internal organization, training, and status of forces shall apply.

8. Financing and cost sharing of expenditures connected with the BPG shall be arranged by mutual consent between appropriate agencies of the two Governments.

9. The head of the BPG shall be the Deputy Commander of NORAD and will operate under the authority of the Commander, NORAD. The deputy head of the BPG will be the Deputy Commander, USNORTHCOM. The head of the BPG (or in his absence his deputy) will report to the Canadian and U.S. Governments on matters of interest relative to the BPG mission as follows:

a. Canada - CDS through the Deputy Chief of the Defence Staff.

b. United States - CJCS through the Commander NORAD/US NORTHCOM

10. Specific duties of the head of the BPG:

a. Ensure the BPG focus remains on maritime and land-based threats to Canada and the United States, as well as cooperation and support to civil authorities in both nations in times of major emergencies;

b. Develop bi-national contingency plans, consultation and decision-making arrangements that describe processes which could be followed in the event attacks, threats, incidents, or emergency circumstances warrant independent, cooperative or coordinated military or civil and military response. Plans and arrangements will be reviewed by the head of the BPG and submitted to both governments. These plans and arrangements shall be separate from existing bi-national aerospace defense guidance under the NORAD Agreement, which remain unchanged;

c. Ensure development and awareness of efficient coordination mechanisms between Canadian and U.S. militaries, as well as the appropriate lead federal agencies of both nations. In Canada, these mechanisms will be coordinated through the National Defence Headquarters. In the United States, these mechanisms will be coordinated through the Joint Staff/J5.

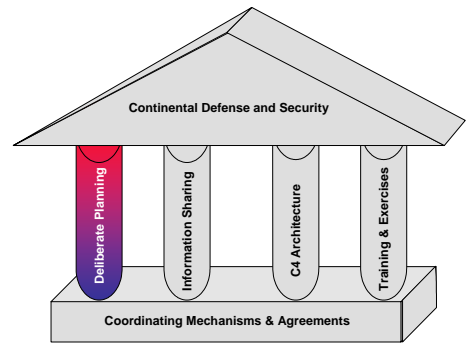
11. The sharing of classified military information, technology and material related to the conduct of missions, as defined, provides mutual political and military advantage. The governments shall exchange and provide access to this classified military information, technology, and material to the maximum extent possible in accordance with existing national laws, policies and directives (e.g., the 1962 General Security and Information Agreement).

//original signed//

R.R. HENAULT
General, CF
Chief of Defence Staff

//original signed//

RICHARD B. MYERS
General, USAF
Chairman, Joint Chiefs of Staff



APPENDIX B: BACKGROUND AND DISCUSSION SUPPORTING CHAPTER 2. REVIEW AND DEVELOPMENT OF CANADA-U.S. DEFENSE PLANS

An overview of the Canada and the United States (CANUS) Strategic Planning System was provided in Chapter 1 (Figure 4) to provide information to readers of both nations greater understanding on the political and military interface at the strategic level. While Chapter 1 focused predominantly on the upper half of the figure, this appendix provides information and insights on the lower half of the CANUS Strategic Planning System diagram (circled in Figure B-1), by addressing the results of the Bi-National Planning Group's (BPG) review and development of CANUS plans.

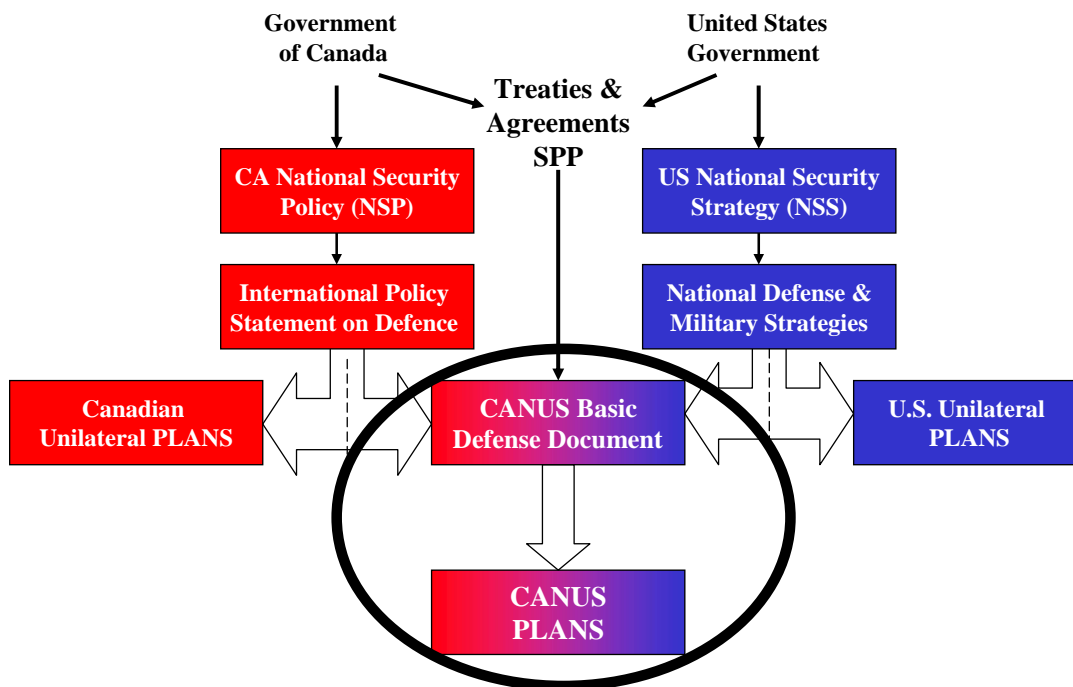


FIGURE B-1: CANUS STRATEGIC PLANNING SYSTEM

Review of Previous Plans

The BPG analysts studied the following CANUS defence plans: The *Basic Security Document* (BSD, 1999), the *Land Operations Plan* (LANDOP, 1993), the *Maritime West Operations Plan* (MARWESTOP, 1996), the *Maritime East Operations Plan* (MAREASTOP, 1987) and the draft *Combined Defense Plan* (CDP). Additionally, the BPG studied a number of non-military national plans and several-hundred policy documents that influence and affect the CANUS plans. A list

of some of the policy documents reviewed is located in Appendix G of this report, and the full documents are in the electronic Library that was created by the BPG.

PLAN	Date Signed	Headquarters		Relationship	Staff	Assessment
		U.S.	CA			
NORAD CONPLAN 3310	21-Apr-04	NORAD		Bi-National	Full Time	Current
CANUS BSD	20-Aug-99	MCC		Bi-Lateral	Part Time	Outdated
CANUS LANDOP	24-Mar-93	FORSCOM	LAND FORCES	Bi-Lateral	Part Time	Outdated
CANUS MAREASTOP	30-Oct-87	USACOM	MARLANT	Bi-Lateral	Part Time	Outdated
CANUS MARWESTOP	20-Jun-96	USPACOM	MARPAC	Bi-Lateral	Part Time	Outdated

FIGURE B-2: CANUS PLANS STATUS

Excluding the *North American Aerospace Defense Concept Plan* (NORAD CONPLAN), the remaining CANUS plans are all outdated (Figure B-2) as they do not address the new threat environment, nor do they reflect new defense and security organizations, agreements and/or partnerships. The responsible headquarters have not conducted the required bi-annual reviews and updates to these plans, in part because systematic mechanisms (policies and procedures) were not in place to ensure that the mandatory bi-annual reviews were conducted.¹ The Canadian Forces Operational Planning Process (OPP) and U.S. Joint Operation Planning and Execution System (JOPES) cyclic review processes were not followed for these plans, and, therefore, CANUS information sharing also suffered since adaptive planning was not routinely conducted.²

The BPG analysis focused on the reasons why the CANUS plans have become outdated and obsolete. Our analysis identified the following factors:

1. **Environment.** The strategic threat environment has changed. The threat has shifted from a bi-polar East and West paradigm into a multiple threat environment that includes asymmetric threats and attacks from non-nation state groups such as Al-Qaeda.³ The responsible headquarters had not adopted models of continuous change and reassessment,⁴ which would help defeat highly adaptive adversaries; hence the CANUS planning processes had not kept pace with the changing threat environment.
2. **Staffing.** In the past, non-dedicated and part-time staffs have been assigned the responsibility to develop and update these combined plans. Coordination on issues of mutual concern has been difficult because of geographic and organizational separation. In addition, since the CANUS ‘family of plans’ was functionally stove-piped, coordination or interoperability among the land, maritime and aerospace plans did not exist. Unable to work side-by-side, to address issues of mutual concern for the defense and security of our continent, these staffs were unable to maintain current operations plans. As an example, the Military Cooperation Committee (MCC) was given the *responsibility* to update the BSD and the CDP, but has not had sufficient *authority* or resources to accomplish this task. In contrast, NORAD has had a dedicated planning staff; hence, NORAD’s CONPLAN for the aerospace defense of North America is a current, combined plan that has been reviewed every two years, and updated as required. The BPG attributes the regular and systemic updates of this plan to: a clear mandate from both nations; use of a full-time and dedicated planning staff with Canadians and Americans working side-by-side; prioritization of the CONPLAN in the U.S. Joint Strategic

Capabilities Plan (JSCP); and the fact that the Commander of NORAD and the NORAD bi-national chain of command have enforced staff discipline.

3. Command Priorities. Even after both countries elevated the priority for the other CANUS plans to be re-written, competing command priorities have hampered efforts that should have been invigorated by the following policy directives:
 - a. Bi-National: The *Enhanced Military Cooperation Agreement* is the diplomatic agreement (signed in 2002) that created the BPG. The Terms of Reference (located at Appendix A) supplement the Agreement and tasked the BPG to develop contingency plans to defend both nations and provide support to civil authorities during national emergencies.⁵ This agreement highlighted the political will and emphasized the need for enhanced military cooperation between Canada and the U.S.
 - b. United States: The U.S. President, as Commander in Chief, issues the *Unified Command Plan* (UCP), which assigns missions and responsibilities to the combatant commanders. Signed in 2005, the UCP tasked U.S. Northern Command with “planning for the bi-national Canada-U.S. land and maritime defense of the Canada-U.S. region,” which highlighted U.S. Northern Command’s significant planning responsibility with Canada.⁶ In addition, the *Security Cooperation Guidance* (SCG) describes the U.S. Secretary of Defense’s priorities for enhancing existing partnerships. The Secretary’s priorities include: “Continental Defense: Integrated North American homeland defense efforts providing a comprehensive and mutually beneficial continental defense architecture that effectively protects the homeland.”⁷
 - c. Canada: Canada’s *International Policy Statement on Defence* (signed in 2005) is a Prime Minister-level document that provides policy direction in “developing [with the U.S.] military-to-military arrangements for the support of civilian authorities during crises and emergencies,” and “exploring with the United States ways to enhance our bi-national defence cooperation.”⁸

These strategic-level documents all contributed to greater combined planning over the past two years. While progress has been made, and staff communication has increased, there is still work to be done before new combined plans are signed and implemented as discussed below. Key to full understanding of deliberate plans is that treaties, agreements and policies drive the military to military direction and commitments. This strategic-level military direction has in the past been expressed in the NORAD Agreement and Terms of Reference, and the CANUS Basic Security Document. These strategic documents have been the drivers of deliberate and/or adaptive planning. Therefore the newly created Basic Defense Document shown in Figure B-1 is a key driver or catalyst for the combined plans that are discussed in the section that follows.

BPG Plan Concept and Development

Scenario Development. Existing CANUS plans have not kept pace with changes in the dynamic threat environment. Adaptive planning that is threat-based results in joint and combined plans that can be executed in real time. To facilitate threat based planning, eight scenarios were developed to assess national defense plans and the potential of a combined response with a continental focus to defense and security. These BPG scenarios included:

- Container ship detonates nuclear devices at major ports.
- Biological/chemical attacks from offshore trawlers.
- Terrorism on U.S. and Canadian bridges, locks and tunnels.
- Power grids and pipelines blown-up on CANUS border.
- Terrorists explode a dirty bomb in Windsor/Detroit.
- Direct attacks on U.S. Congress and Canadian Parliament.
- Homeless in multiple cities infected with smallpox.
- Major earthquake on U.S. / Canadian West Coast.

Use of these scenarios helped drive the development of the plans discussed below.

<u>U.S. Joint Operations Planning and Execution System</u>	<u>CF Operational Planning Process</u>
JOPEs deliberate planning has 5 phases.	CF OPP has 6 steps.
PHASE 1: Initiation.	STEP 1: Initiation.
PHASE 2: Concept Development.	STEP 2: Orientation.
<ul style="list-style-type: none"> • STEP 1: Mission Analysis. <ul style="list-style-type: none"> • Product of Step 1 is a mission statement. • STEP 2: Planning Guidance. <ul style="list-style-type: none"> • Define the end-state. • List tentative COAs. • STEP 3: Staff Estimates. <ul style="list-style-type: none"> • Staff analysis of COAs. • Staff estimates feed into the Commander's Estimate. • STEP 4: Commander's Estimate. • STEP 5: CINC Strategic Concept (written per CJCSM 3122.03A). • STEP 6: CJCS Concept Review. 	<ul style="list-style-type: none"> • Includes Mission Analysis. • Includes Operational CoG. • Results in a briefing to the Commander. • Commander's Planning Guidance with several COAs and Warning Order (if needed).
PHASE 3: CONPLAN Development.	STEP 3: COA Development.
PHASE 4: Plan Review.	STEP 4: Decision Briefing.
PHASE 5: Supporting Plans.	<ul style="list-style-type: none"> • Results in CONOP.
	STEP 5: Plan Development.
	<ul style="list-style-type: none"> • CONOP is developed into OPLAN.
	STEP 6: Plan Review.

FIGURE B-3: COMPARISON OF U.S. JOPES AND CF OPP

Plans Overview. The BPG reviewed strategic level documents as discussed in Chapter 1, Part 2D (see Figures 4 and B-1). Based upon strategic guidance from both nations, the BPG initiated planning and concept development for three future CANUS plans: Basic Defense Document, Civil Assistance Plan (CAP) and the Combined Defense Plan (CDP). A synopsis of each document is provided below:

1. **Basic Defense Document (BDD).** As illustrated in Figure B-4, the BDD is intended to provide strategic-level direction from the Chief of the Defence Staff (CDS) and the Chairman Joint Chiefs of Staff (CJCS) for the development of NORAD’s CONPLAN, the CAP and the CDP. The BDD evolved from the *Basic Security Document* (BSD, 20 August 1999), which had been written as an operationally focused plan. To reflect the emerging CANUS framework, key policy statements have been emphasized in the new BDD, while theater or operational level details concerning CANUS interoperability have been embedded in the draft CAP and CDP. (The BPG *Interim Report on Enhanced Military Cooperation* included the BDD as an Appendix.) Commander, U.S. Northern Command and the Deputy Chief of the Defence Staff (DCDS) Group assumed responsibility for staffing the BDD in June 2004. With the activation of Canada Command on 1 February 2006, Commander, U.S. Northern Command and the Commander, Canada Command should further refine the BDD. At present, it remains unsigned.

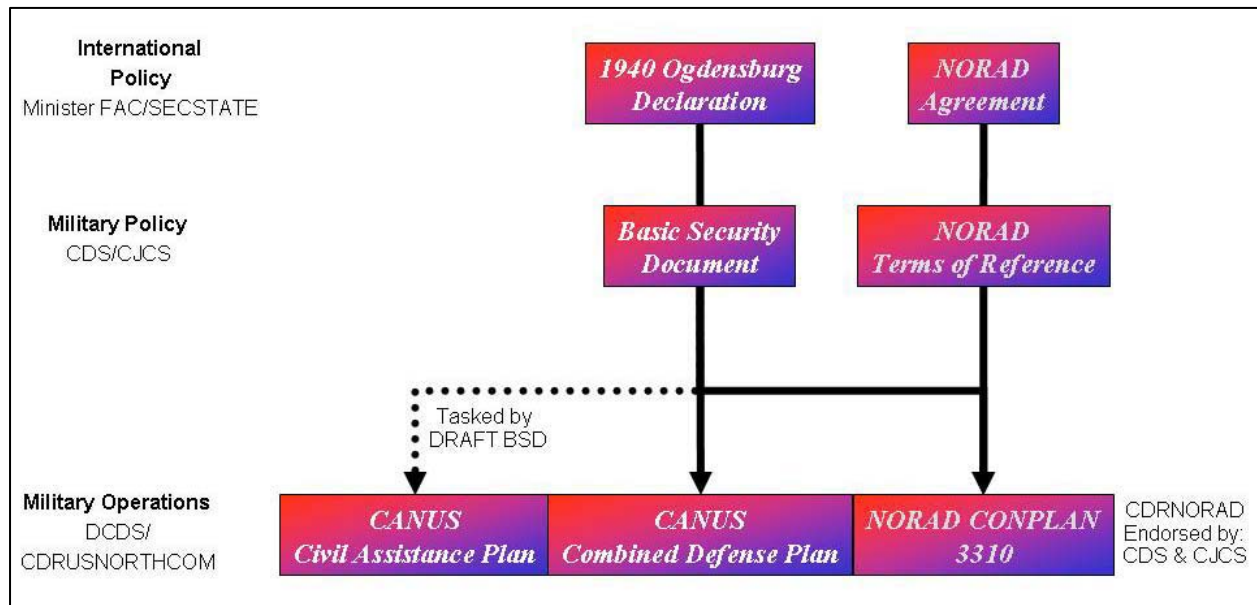


FIGURE B-4: CANUS PLANS STRUCTURE

2. **Civil Assistance Plan (CAP).** The CAP establishes a cooperative and coordinated military-to-military response to national requests for military assistance to natural disasters or other major emergencies in order to save lives, prevent human suffering and mitigate damage to public property.⁹ The CAP focuses on interoperability, not integration, at a theater and/or operational level and relies on national plans for operational, tactical military civil response. Previously, the authority for the CAP lay with the Deputy Chief of the Defence Staff (DCDS) and Commander, U.S. Northern Command. The development of the CAP was transferred to

the DCDS and Commander, U.S. Northern Command in July of 2005. With the stand-up of Canada Command on 1 February 2006, the CAP now requires a complete vetting to ensure the accurate reflection of Canada Command's concept of operations and revised Canadian command structures.¹⁰ Commander, Canada Command and Commander, U.S. Northern Command should retain approval authority over the CAP as a functional plan.

3. Combined Defense Plan (CDP). The CDP facilitates combined defense of the continent across multiple domains. The plan focuses on interoperability between Canada and the U.S. for land and maritime defense, and links operational military actions from the national plans.¹¹ The intent of the CDP is to consolidate the MARWESTOP, MAREASTOP and LANDOP into a single document, which would eliminate the identified stove-pipes and lack of joint and combined interoperability. The authority for the CDP lies with Commander, U.S. Northern Command and the DCDS. The development of the CDP was transferred to the DCDS and Commander, U.S. Northern Command on November 30, 2005. However, it requires further development between Canada Command and U.S. Northern Command before it will be ready for signature and implementation.

Combined Plan Development Summary.

Development of the CAP was complicated by a number of factors. One important aspect was the lack of senior guidance in the form of an approved mission analysis. In accordance with the CF OPP and JOPES, an approved mission analysis is required for plan development. Theater-Strategic and/or Operational Commanders' approval of the mission analysis would have controlled the scope, breadth and depth of controversy and debate over the plan.

Although the Bi-National Planning Group was doing Concept Development, approval at each step or phase remained with national staffs; hence, there were complications in the conduct of deliberate planning between geographically separated national staffs. To an extent, this was mitigated by the presence of a dedicated, fully assigned staff responsible for the function of drafting the document and pulling in key planners from national stakeholders in order to achieve resolution on issues.

The deliberate planning process for the CDP was greatly improved as a consequence of lessons learned while developing the CAP. Greater attention was placed on coordinating and achieving executive leadership guidance. Specifically, the BPG achieved mission analysis approval by the DCDS and Commander, U.S. Northern Command. This experience highlighted the requirement to formalize the planning process to solidify buy-in by all stakeholders.

Of critical importance was the interest that the national key stakeholders showed in the plan development. Plan development accelerated each time executive leadership provided planning guidance. The experience in developing the CDP confirmed the value of national key stakeholder involvement coordinated through an established planning organization. Furthermore, the senior leaders' interest throughout the planning process ensured clarity of authority and responsibility.

The presence of a dedicated, fully assigned staff proved effective in pulling in key stakeholders from the national staffs in order to achieve resolution on issues. A bi-national planning staff

managed the input of key national planners, and highlighted the benefits of Canadians and Americans working side-by-side during plan development. This arrangement served to bridge the gaps at the theater/operational level among NORAD, U.S. Northern Command and the DCDS Group (DCDS responsibilities were transferred to Canada Command on 1 Feb 2006).

THE FUTURE OF CANADA-UNITED STATES DEFENSE PLANS

Comprehensive Defense and Security Agreement (CDSA). Development and approval of a Comprehensive Defense and Security Agreement (CDSA) would eliminate ambiguity and provide critical political intent and overarching guidance for enhancing joint and combined military cooperation, and provide diplomatic guidance that will shape CANUS interoperability. As the Canada-United States military relationship continues to evolve, Commander Canada Command and Commander U.S. Northern Command should study the effectiveness of merging strategic-theater and operational documents. There is value in looking across the spectrum of CANUS documents to better streamline the process of our two nations working together and establishing priorities for combined cooperation from a continental defense and security perspective. E.g. The BDD developed by the Military Cooperation Committee (MCC) could potentially be replaced by terms of reference for the CDSA, if such an agreement is approved.

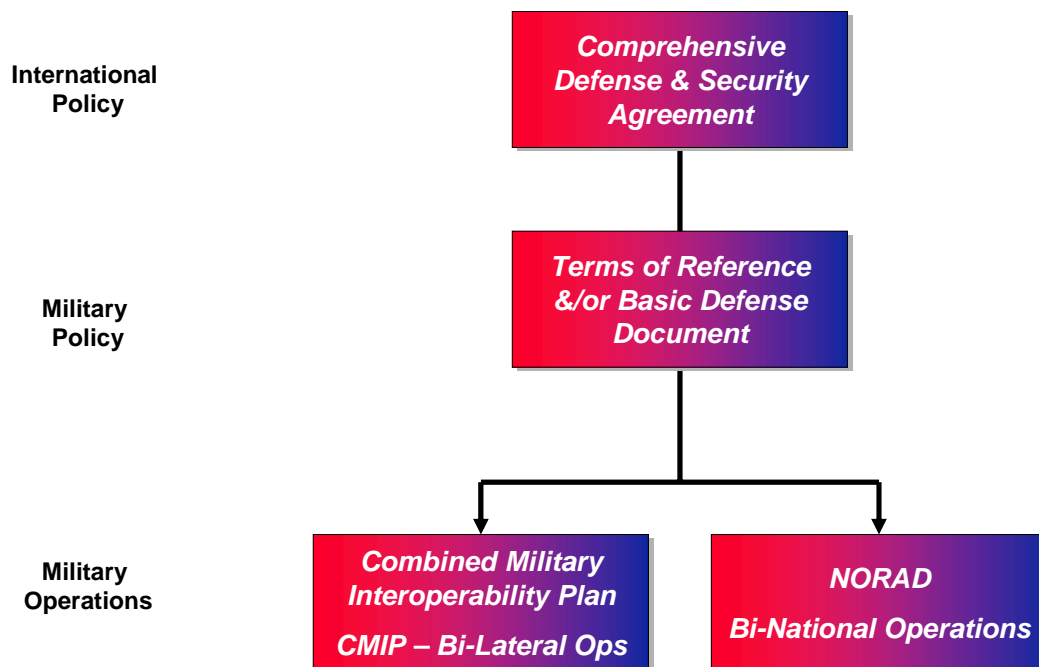


FIGURE B-5: FUTURE CANUS PLANS STRUCTURE

Combined Military Interoperability Plan. As time progresses, after the CAP and CDP are approved and implemented, merger of these plans may be an evolutionary next-step. In the spirit of reducing gaps and ensuring smooth transitions between strategic-theater and/or operational-level seams, the future of CANUS plans may lie in the merging of the CAP and CDP into one. See Figures B-4 and B-5.

Many of the interoperability processes and procedures are similar, whether military forces are supporting civil agencies (using CAP) or defending the CANUS Region (using CDP). As military missions span the spectrum from security to defense of the CANUS Region, maintaining multiple combined plans to support interoperability adds additional seams. An all-encompassing continental plan, nominally called the Combined Military Interoperability Plan (CMIP), could be the foundation for all joint and combined operations among Canada Command, U.S. Northern Command, and potentially NORAD (Figure B-6).

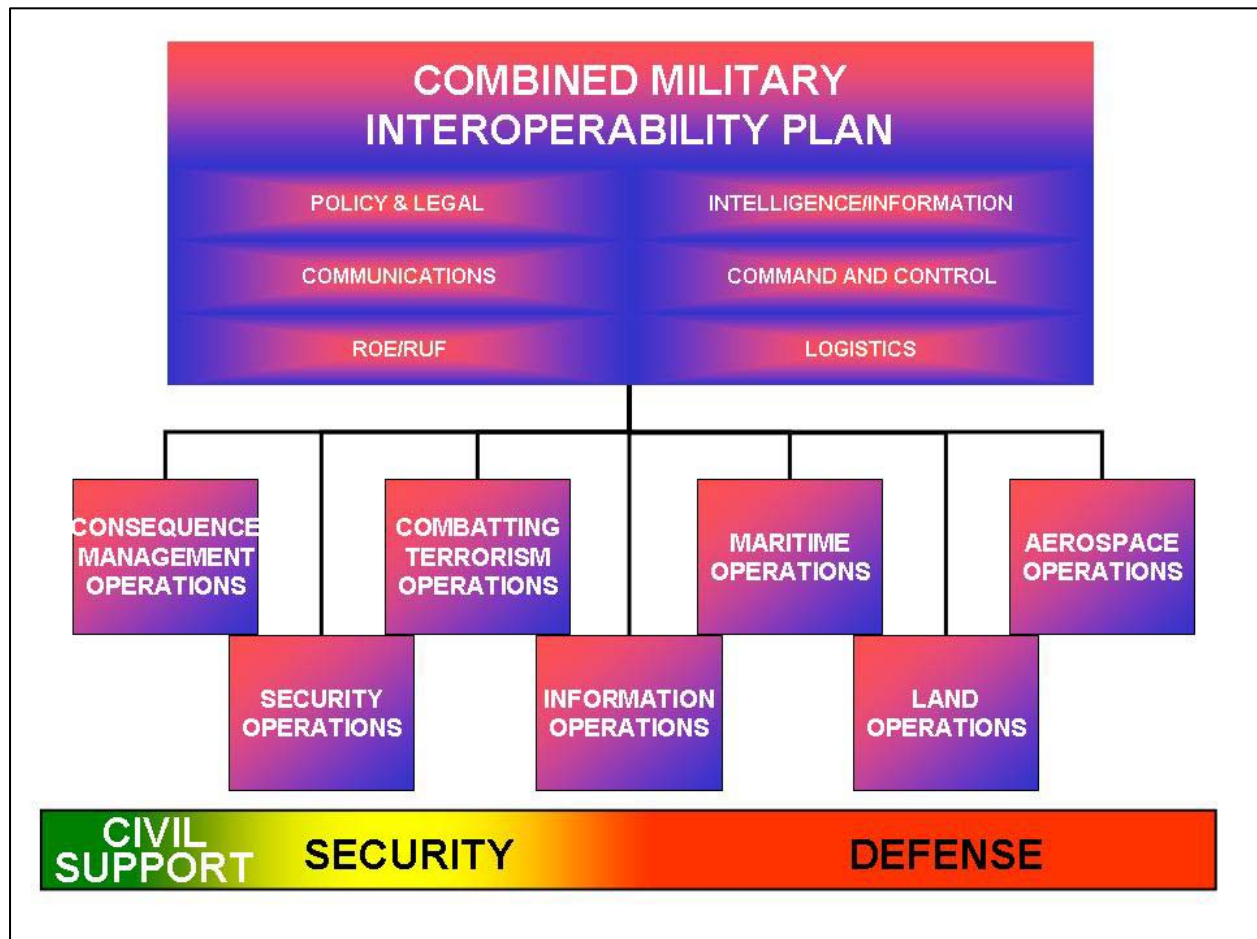


FIGURE B-6: COMBINED MILITARY INTEROPERABILITY PLAN

This proposed document could simplify the matrix of unilateral defense plans that are being linked by the CAP and CDP. Fundamentally, the CMIP would facilitate the following:

- Focus on joint and combined interoperability at the theater/operational and combined joint task force levels.
- Facilitate steady-state operations (information and intelligence sharing, on going combined training and exercises with strategic oversight).
- Focus on the military processes and procedures to plan and prepare for continental defense and security.

- Provide initial CANUS guidance on the conduct of bi-lateral, bi-national or continental operations.
- Posture strategic headquarters for all potential missions.
- Adaptable as commands change, and to include other domains and/or nations.

In partnership with Public Safety and Emergency Preparedness Canada (PSEPC) and the U.S. Department of Homeland Security, the CMIP could evolve into an umbrella Bi-National Homeland Defense and Security Plan that clarifies the optimum distribution of effort among CANUS agencies for prevention, preparation and response.¹²

U.S. Northern Command properly uses JOPES and adaptive planning concepts for unilateral U.S. planning; similarly Canada Command uses CF OPP for Canadian unilateral planning. However, joint and combined CANUS planning must shift from ad-hoc planning to systematic planning processes that are routinely conducted at a minimum of every 2 years. If Canada Command and U.S. Northern Command automate and link key planning processes in a networked, virtual environment to enable real-time collaboration and rapid production of high-quality planning products, then our plans will keep pace with the threat environment.¹³ In addition, BPG has found that deliberate planning is greatly facilitated by Canadians and Americans working side-by-side, resulting in deliberate plans that can be executed in real time.

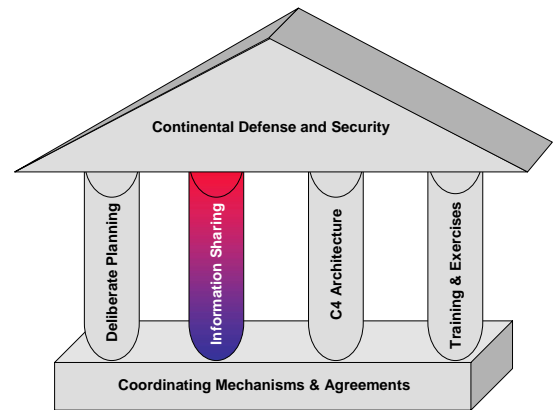
Adaptive planning, CF OPP and U.S. JOPES provide the processes for translating senior leaders' guidance into joint and combined operations. National plans have the requisite information to support CANUS operations during crisis action procedures. However, key to enhancing CANUS defense and security is to focus on combined planning, since development of the deliberate plans is a catalyst for effective information sharing. The information sharing and planning processes result in combined plans that facilitate greater interoperability and thusly ensure our two nations can work together on common goals at a moments notice.¹⁴

Appendix B Endnotes:

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- ¹ "All plans have a limited period of validity due to the changing circumstances upon which they were based. Plans and associated SUPLANs must be reviewed at least every 24 months," *B-GJ-005-500/FP-000 Canadian Forces Operational Planning Process (CF OPP)*, page 5-5. "The joint operation planning process must be flexible, as well. In peacetime, the deliberate planning process requires 18 to 24 months to completely prepare and fully coordinate and review a plan; on the other hand, a crisis may demand a product in just a few hours or days... Development of the plan, coordination among supporting commanders, agencies, and Services, reviews by the Joint Staff, and conferences of JPEC members can take many months, possibly the entire *two-year* planning cycle, per JFSC Pub 1, page 4-5. This was essentially a failure to establish systematic plans, policies and procedures.
- ² Analysis of over 200 empirical studies indicate that strategic planning is a "driver" of information sharing and knowledge management. See Baker, Biff Leland. (2004) *TQM Practice and Theory: A Meta-Analysis of Empirical Studies*. Dissertation Abstracts International, Vol. 65 Issue 1A, page 206. Publisher is Proquest Information & Learning (formerly UMI), Ann Arbor Michigan 48106. Publication #3117237, see pages 180-181.
- ³ In contrast to the Cold War, today's collection environment is characterized by a wider spectrum of threats and targets. For example, non-state actors such as al-Qa'ida present a new type of asymmetric menace. They operate globally, blending into local society and using informal networks for support. Locating and tracking dispersed terrorists and guerrilla fighters hiding in an urban environment—rather than massed armored forces on a European

battlefield—typifies the type of collection problems the Intelligence Community faces today. Such dispersed targets can, and often do, communicate chiefly through methods that are difficult to detect and that some of our collection systems are poorly suited to penetrate. In sum, today's threats are quick, quiet, and hidden. (Commission on the Intelligence Capabilities of the United States Regarding Weapons of Mass Destruction, 31 March 2005, page 354).

- ⁴ Quadrennial Defense Review Report dated 6 Feb 2006 identified that DOD, “must also adopt a model of continuous change and reassessment if it is to defeat highly adaptive adversaries” (QDR, page 1).
- ⁵ See Bi-National Planning Group *Terms of Reference* in Appendix A, see paragraph 5.
- ⁶ *Quadrennial Defense Review Report* dated 6 Feb 2006 identified: “Improved interagency and international planning, preparation and execution will allow faster and more effective action in dealing with 21st century challenges. New modes of cooperation can enhance agility and effectiveness with traditional allies and engage new partners in a common cause” (QDR, page 84).
- ⁷ *U.S. Security Cooperation Guidance (SCG)* dated 22 November 2005, page 45.
- ⁸ Canada's *International Policy Statement (IPS)- Defence: A Role of Pride and Influence in the World*, is available on-line at www.international.gc.ca and www.forces.gc.ca. The IPS-Defence identifies that the Canadian Forces will enhance their role in defending the North American continent by: (1) strengthening their ability to counter threats in Canada, especially in terms of monitoring and controlling activity in the air and maritime approaches to our territory; (2) continuing to contribute Canadian aircraft and other assets to the NORAD mission; (3) ensuring that maritime forces, both regular and reserve, cooperate even more closely with the U.S. Navy and Coast Guard; (4) improving their ability to operate alongside American forces, including through more frequent combined training and exercises; (5) exploring with the United States ways to enhance our bi-national defence cooperation, especially in the areas of maritime security and military support to civilian authorities; and (6) continuing to participate in international operations overseas to address threats at their source.
- ⁹ Bremer Report, National Commission on Terrorism (the Bremer Commission), *Countering the Changing Threat of International Terrorism*, June 7, 2000, available at <http://www.gpo.gov/nct> reinforced the need for civil assistance planning saying that “The Department of Defense must have detailed plans for its role in the event of a catastrophic terrorist attack, including criteria for decisions on transfer of command authority to DOD in extraordinary circumstances.” (page v). It further recommended that “The President should direct the Assistant to the President for National Security Affairs, in coordination with the Secretary of Defense and the Attorney General, to develop and adopt detailed contingency plans that would transfer lead federal agency authority to the Department of Defense if necessary during a catastrophic terrorist attack or prior to an imminent attack. (2) The Secretary of Defense should establish a unified command structure that would integrate all catastrophic terrorism capabilities and conduct detailed planning and exercises with relevant federal, state, and local authorities” (p. 40).
- ¹⁰ Approval of a CANUS Civil Assistance Plan (CAP) would streamline bi-national cooperation, save lives and protect property. E.g. The Canadian Forces (CF) support to the US relief efforts following Hurricane Katrina is known as Operation UNISON 2005, and serves as a precedent for bi-national civil support. During UNISON 2005, about 900 Canadian Forces sailors, soldiers and aircrew contributed to the colossal relief efforts. Obtained 12-27-2005 at: http://www.forces.gc.ca/site/Operations/unison/view_news_e.asp?id=1739.
- ¹¹ This report emphasizes interoperability rather than command and control. Per Dr. Joseph Jockel (2003) *Four US Military Commands: NORTHCOM, NORAD, SPACECOM, STRATCOM - The Canadian Opportunity*, IRPP Working Paper Series, No. 2003-3, Institute for Research on Public Policy, Montreal. “There were worries (in Canada) that NORTHCOM soon would be given command over the Canadian military, which has not happened. And there were more worries that if it ever were given authority over Canadians, a future possibility which cannot be excluded, it could run roughshod over a whole host of Canadian practices, such as bilingualism, women in combat and homosexuals in the military. These worries overlooked the longstanding difference between ‘command,’ which always rests in national hands, and ‘operational command’ or ‘operational control,’ which is given to international or multinational commands such as NORAD.” Obtained from: <http://www.irpp.org/wp/archive/wp2003-03.pdf>
- ¹² Supports *Quadrennial Defense Review Report* dated 6 Feb 2006, page 87.
- ¹³ Supports *Quadrennial Defense Review Report* dated 6 Feb 2006, page 60.
- ¹⁴ Once approved, then combined plans such as the Civil Assistance Plan (CAP) “will improve the speed of bilateral responses through systematic rather than ad hoc mechanisms.” See *North American Defense and Security after 9/11* by LTG Joseph R. Inge and LGen Eric A. Findley, Joint Forces Quarterly, Issue 40, (1st Quarter 2006), page 26, obtained on 3-3-2006 from: http://www.dtic.mil/doctrine/jel/jfq_pubs/4004.pdf.



APPENDIX C: BACKGROUND AND DISCUSSION SUPPORTING CHAPTER 3. INTELLIGENCE AND INFORMATION SHARING

Relationships between any two nations are defined by many factors, both formal and informal. An informal relationship established by people and commerce often precedes the formal relationships between two nations. Information sharing is a critical enabler for a continental approach to defense and security; although quantum leaps in technology have permitted more information sharing even though the policies, nation-to-nation agreements and military-to-military memoranda of understanding often do not keep pace with these changes.

As an example, the U.S. Department of Defense had a need for redundancy in the event of a Soviet-launched nuclear strike. Therefore, in 1968 the Defense Advanced Research Projects Agency (DARPA) contracted with two corporations to create a network that would enable high speed communications between military and university computers which would not be easily disrupted by enemy saboteurs or nuclear weapons, which is now known as “The Internet.”¹ Earlier, Canada and the United States signed the *Canada/United States General Security of Information Agreement* (1962), which provided for the safeguarding of classified information communicated directly between Canada and the United States with the following guidelines for recipients of the information:

- “will not release the information to a third Government without the approval of the releasing Government;
- will undertake to afford the information substantially the same degree of protection afforded it by the releasing government;
- will not use the information for other than the purpose given;
- will respect private rights, such as patents, copyrights, or trade secrets, which are involved in the information.”²

This Agreement does little to improve intelligence or information sharing, since it was written for the *protection* of information, not the *sharing* of information. Despite the major innovations represented by the Internet, and key world events such as the 9/11 attacks, this Agreement was never updated. In addition, Canada and the United States still have no single, all encompassing, Canada/United States information sharing agreement. It is therefore necessary to improve the CANUS military to military information sharing by developing or updating information protection and information sharing policies and exploiting the latest commercial technologies.³

Intelligence and threat streams are provided to NORAD and U.S. Northern Command from a variety of sources, to include defense and non-defense agencies. Some of these organizations may not share NORAD and U.S. Northern Command's desire to provide this intelligence or information in a Releasable to Canada and the United States (RELCANUS) default-format. Therefore, if information or intelligence is deemed bi-nationally significant, it is a command responsibility (the requesting analyst in particular) to undertake the requisite measures to have the releasable portions of the information and intelligence reclassified as RELCANUS. It is highly likely that, due to either the timeliness of the situation⁴ or security classification guidelines, some information will be unnecessarily classified U.S. NOFORN or CEO. Safeguards should not negate the need to share releasable, mission essential information. Both countries should continue moving forward with their "write-to-release policies" enabling the maximum amount of information to be shared among defense partners.

The Information Exchange Process (IEP) with the Information Exchange Broker (IEB) concept has proven its value internally within U.S. Northern Command and externally with other mission partners. Past experience has shown that the IEP concept can be readily transferred to other organizations (e.g., Joint Force Headquarters-State, etc.) or be established for special events (e.g., national special security events). A common operational collaborative tool suite, with accompanying training, tactics and procedures, has the potential to enhance continental defense and security cooperation among NORAD, Canada Command and U.S. Northern Command during key training or real-world events. In addition, Canadian personnel integrated into battle staff cells require a full complement of computer networks needed to perform their duties. Within NORAD and U.S. Northern Command, these networks include Canadian Defence Wide Area Network (DWAN) and the Unclassified, but sensitive, Internet Protocol Router Network (NIPRNET), Canadian Forces Command System Classified Work Station, and the NORAD Enterprise Network (previously discussed in Chapter 3).

In May 2004, the BPG hosted a Counter Intelligence, and Law Enforcement (CI/LE) conference, with Canadian and U.S. participants from intelligence, counter intelligence and law enforcement agencies. The participants identified seven key needs for interagency collaboration:

- National policy on release of classified information cross-border.
- Defined and approved asymmetric threat requirements.
- Reliable communication links between Canadian and U.S. CI/LE organizations.
- Central clearing house for CI/LE information.
- Clear understanding of national/bi-national protocols and procedures.
- Training on roles and responsibilities of Canadian and U.S. CI/LE organizations.
- Integrity of information sharing.

The CI/LE needs that were identified reinforced BPG's findings on military-to-military information sharing as well. We found that:

- Information sharing between like-organizations occurs, but often in ad-hoc fashion (e.g. communications between CANUS maritime organizations occurs).
- Bi-national cross-functional and cross border communications among air, land and maritime organizations is weak due to a lack of systematic processes (See Tab A).

- There is a need for enhanced air and maritime domain awareness capabilities to provide increased situational awareness and shared information on potential threats through rapid collection, fusion and analysis.⁵
- CANUS cross-departmental communications between defense and other departments is not systematic. [A CANUS CI/I/LE community visualization tool was developed to help remedy these problems (see greater detail in Tab B)].

In an attempt to examine the information sharing environments in Canada and the United States, both countries previously conducted studies. These studies aimed at identifying gaps and seams with regards to information sharing domestically as well as bi-nationally in the new threat environment. Some of the applicable national findings are as follows:

Canadian Study: The Standing Senate Committee on National Security and Defence (SCONSAD) conducted a study on the structure and coordination of government identifying several defense and security information-based opportunities for improvement. SCONSAD determined:

- Greater need for Canada-U.S. coordination.
- Slow Progress at Information-Sharing.
- Lack of surveillance coordination.
- Information fusion failures.
- Coordination lacking in coastal defence.
- Canada is too inward looking.

To correct some of these shortcomings, Canada’s International Policy Statement-Defence established that “the Canadian Forces will expand and enhance their information and intelligence fusion capability to better assess large amounts of intelligence in support of military and government decision making”⁶ while also improving “coordination with other government departments and interoperability with allied forces, particularly the United States.”⁷

United States Study: The United States 9/11 Commission Report⁸ looked at the information flow within and among the federal agencies that had responsibilities before, during and after the terrorist attacks. The 9/11 Commission findings overlapped heavily with the SCONSAD study, emphasizing that:

- Information that was critical to informed decision-making was not shared among agencies.
- There are no penalties for not sharing information.
- Agencies uphold a “need-to-know” culture of information protection rather than promoting a “need-to-share” culture of integration.

Although Americans often look to technology to fix systemic problems, the 9/11 Commission identified that technology, or a lack thereof, is not always the issue. Although the United States has the most robust satellite communications system in the world, information was not shared among multiple agencies due to shortcomings in culture and other non-technical mechanisms.

The 9/11 Commission further observed:

“Technology produces its best results when an organization has the doctrine, structure, and incentives to exploit it. For example even the best information technology will not improve information sharing so long as the intelligence agencies’ personnel and security systems reward protecting information rather than disseminating it”⁹

As a result of the 9/11 Commission findings, a new U.S. Law, called the *Intelligence Reform and Terrorism Prevention Act of 2004*¹⁰ was passed, which identified the need for information sharing as well:

- “It is the sense of Congress that— the Federal Government should exchange terrorist information with trusted allies” (Sec 7210).
- The policies, procedures, guidelines, rules, and standards ... shall “address and facilitate, as appropriate, information sharing between Federal departments and agencies with foreign partners and allies” (Sec 1016).

To correct some of these shortcomings, on 4 June 2004, the Director of the Central Intelligence published Directive 8/1 (DCID 8/1) to improve intelligence information sharing. The DCI directed all members of the U.S. Intelligence Community (IC) to collaborate closely and share information freely to ensure the best overall intelligence product for customers. DCID 8/1 also directs the Special Assistant to the DCI to ensure that collaboration and information sharing with foreign partners is conducted with this same intent. Canada is the United States’ closest neighbor, a strong ally and good friend,¹¹ so the *Intelligence Reform and Terrorism Prevention Act* of 2004, as well as DCID 8/1, should assist in the flow of information among Canadian and U.S. agencies.

Intelligence Categories

A new way of looking at the sharing of information, based on the new threat environment, is needed in order to change the mindset of analysts and institutions that were originally set up to fight the Cold War. However, one must first ascertain what information needs to be shared with whom. Hence, this portion of the report has been written with sufficient detail in the text and explanatory endnotes so that readers who may not be familiar with intelligence terminology or organizations would have a grasp of key concepts herein. Using a Canadian paradigm, information and intelligence is described below in four categories: foreign, security, military and criminal intelligence.¹²

Foreign Intelligence. Foreign intelligence is focused on the capabilities, activities and intentions of foreign states, organizations and individuals with an impact on vital Canadian or U.S. interests. In Canada, foreign intelligence falls within the purview of the Canadian Communications Security Establishment (CSE), but DND, Foreign Affairs Canada (FAC), the Canadian Security Intelligence Service (CSIS) and others contribute. Within the U.S., the Central Intelligence Agency (CIA) is responsible for foreign intelligence.¹³

Security Intelligence. Security intelligence and information is focused on activities such as terrorism that might threaten Canadian or U.S. security. In Canada, the Solicitor General, through CSIS, is principally responsible for security intelligence, but DND, FAC and the Royal Canadian Mounted Police (RCMP) are also involved. In the U.S., several organizations share the responsibility for security intelligence: the Department of Homeland Security (DHS) is tasked to prevent terrorist attacks within the U.S., reduce America's vulnerability to terrorism, and minimize the damage and recover from attacks that do occur; the Federal Bureau of Investigation (FBI) deals with counter-espionage and data about international criminal cases;¹⁴ and the U.S. Coast Guard (USCG) deals with information related to U.S. maritime borders and homeland security.¹⁵

Military Intelligence. Military intelligence focuses on the strategic, operational and tactical capabilities and intentions of foreign states and/or organizations. In Canada, military intelligence is basically the preserve of DND and the Canadian Forces (CF), but FAC and the Solicitor General may contribute. In the U.S., the Defense Intelligence Agency (DIA) provides military intelligence to war fighters, policymakers and force planners, and the U.S. Army, Navy, Air Force and Marine Corps intelligence organizations all collect and process intelligence relevant to their particular service needs.

Criminal Intelligence. Criminal intelligence includes information about criminals and criminal organizations, as well as how and why they commit crime. Within Canada, criminal intelligence is the primary responsibility of the Solicitor General, through the RCMP and CSIS. Within the U.S., law enforcement agencies are found at local, state and federal levels. All have a responsibility depending upon their areas of jurisdiction.

In addition, members of the U.S. Intelligence Community (IC)¹⁶ have unique responsibilities that do not necessarily fit into just one category to include:

- U.S. Department of State (DoS)—deals with information affecting US foreign policy.
- U.S. Department of Energy (DoE)—performs analyses of foreign nuclear weapons, nuclear non-proliferation, and energy security-related intelligence issues in support of U.S. national security policies, programs, and objectives.
- U.S. Department of Treasury (DoT)—collects and processes information that may affect US fiscal and monetary policy.
- U.S. National Geospatial-Intelligence Agency (NGA)—provides timely, relevant, and accurate geospatial intelligence in support of national security.
- U.S. National Reconnaissance Office (NRO)—coordinates collection of information from airplane and satellite reconnaissance by the military and the CIA.¹⁷
- U.S. National Security Agency (NSA)—collects and processes foreign signals intelligence information for our nation's leaders and war fighters, and protects critical information security systems from compromise.

Bottom Line

The bottom line is that each of the agencies identified above has a role to play. If we, as two sovereign nations, continue to stove-pipe the information or do not share across the border, then we are creating gaps that can be exploited by the asymmetric threat. Similarly, it is no secret that actionable intelligence in the symmetric or asymmetric threat environment is enhanced by the

exchange of information domestically as well as bi-nationally between Canada, the United States and other allies. The problem today is that the intelligence communities in both countries have to get used to working in a manner that is somewhat foreign to them. Years of having worked in stove-piped environments has created a culture where information may be guarded zealously by each organization.¹⁸

In the past, the U.S. Department of Defense's approach to information sharing was focused on written agreements for every type of information that might be shared and a fear that sharing too much would result in adverse action.¹⁹ In today's threat environment actionable intelligence may be missed. The fusion of information that is required by all players domestically as well as bi-nationally is essential to success. For instance, a cell or group of individuals working in Detroit may have ties to a cell operating in Windsor. If both nations are able to collect actionable information on each cell domestically, but don't share the information with each other on the actions of each cell, then there is a good chance that critical indications and warnings could be missed.

In addition, both militaries need to be aware of occurrences or events in the domestic realm (within the constraints of national policies and laws), since there are overlaps in responsibilities when dealing with asymmetric threats. This requirement exceeds those of the past for the simple reason that the asymmetric threat may initiate attacks within our nations (in contrast to cold war threats that originated externally). As a result, the military's domestic "need to know" is heightened by the likelihood that it will be asked to defend against, interdict or assist civilian authorities in their efforts to prevent or address an asymmetric attack. For example, an asymmetric attack may originate from the air, land or sea, and its effects can range from local devastation to regional or national devastation depending upon the type of weapon being used in the attack. Simultaneously, civil agencies will be involved in consequence management. Thus, the clear distinction between military and civilian areas of responsibility that existed for over fifty years since the end of World War II has been somewhat blurred by the new threat posed by asymmetric groups.

Over the past few years, the U.S. Northern Command Joint Operations Center (NC JOC) has brought together members of the military and Interagency Community, which has significantly enhanced information sharing among numerous defense and security partners in the United States. To improve information sharing between Canada and the United States, U.S. Northern Command and the BPG placed Canadian Forces officers in the NORAD-U.S. Northern Command Combined Intelligence and Fusion Center (N-NC CIFIC) and in the U.S. Northern Command Joint Operations Center (NC JOC). The BPG determined through this "proof of concept" that the presence of Canadians and Americans working side-by-side in the N-NC CIFIC and NC JOC significantly increased information sharing and situational awareness of events on each side of the border. Hence, this concept should be formalized to continue beyond the BPG mandate. In addition, as U.S. Northern Command replaces the CIFIC construct with the new Joint Intelligence Operations Center (JIOC), they will significantly improve bi-national information sharing by placing Canadian Forces personnel in key positions throughout its developing structure."

TAB A: INFORMATION SHARING AND MARITIME DOMAIN AWARENESS

INTRODUCTION

The TOR tasked the BPG to maintain awareness of emerging situations through maritime surveillance activities; sharing intelligence and operational information in accordance with national laws, policies, and directives under the auspices of intelligence arrangements between the Department of National Defence and Department of Defense. This shall include assessment of maritime threats, incidents, and emergencies to advise and/or warn governments.

Over the past two years, both Canada and the United States have made great strides in maritime domain awareness (MDA), which is defined herein as the effective understanding of anything associated with the global maritime domain²⁰ that could impact the security, safety, economy or environment of Canada and the United States.²¹

BOTTOM LINE UP FRONT

It is not possible to look at MDA as a defense-only or a security-only issue. A continental approach to defense and security could facilitate bi-national maritime domain awareness and a combined response to potential threats, which transcends Canadian and U.S. borders, domains, defense and security departments or agencies.²² MDA must be a joint, combined and interagency effort that contributes to timely decisions that are essential for success. On January 20, 2002 President George Bush identified that “the heart of the Maritime Domain Awareness program is accurate information, intelligence, surveillance, and reconnaissance of all vessels, cargo and people extending well beyond our traditional maritime boundaries.”

Bi-National MDA is dependent on effective information sharing among various maritime stakeholders. Although national laws and policies permit the sharing of information, this direction is not *routinely* being followed at the mid-level management and analyst level in part because there is no incentive to share information. Surveillance information may not be expeditiously populated due to the number and diversity of bi-national agencies involved, and the national and cultural barriers that exist among them.

When looking at MDA initiatives, both governments need to view the shipment of goods from warehouse to warehouse to ensure that inter-modal cargo is not tainted. To do so, the MDA efforts of DND, PSEPC, DOD, and DHS must be seamless 24/7 among all elements to include, but not limited to:

- NORAD-NORTHCOM Combined Intelligence and Fusion Center (CIFC)
- NORAD-NORTHCOM Joint Operations Center (JOC)
- Canada Command’s Joint Command Centre (Canada COM JCC)
- CA National Defence Command Centre (NDCC)
- U.S. National Military Command Center (NMCC)
- Canadian Marine Security Operations Centres (MSOC)
- Joint Task Force – Pacific (formerly MARPAC) - Athena
- Joint Task Force – Atlantic (formerly MARLANT) - Trinity

- U.S. Coast Guard (USCG) Sectors and Regions
- U.S. National Maritime Intelligence Center (NMIC)
- U.S. Maritime Intelligence Fusion Center Atlantic (MIFC LANT)
- U.S. Maritime Intelligence Fusion Center Pacific (MIFC PAC)
- Other interagency centers (PSEPC, DHS, DoJ, RCMP, etc.)²³

5. Ships using the great circle routes to North America often transit Canadian waters prior to arriving in U.S. ports. Ships bound for Canada from South America typically transit U.S. waters before arriving in Canadian ports. Hence it is essential to share information on these vessels of interest.²⁴

RECOMMENDATIONS (These recommendations complement those found in Chapter 3)

1. NORAD, Canada Command and U.S. Northern Command need to adopt a layered approach for reporting and monitoring to provide timely warning of vessels involved in suspected terrorist or criminal activity that are approaching U.S. and Canadian waters, in concert with the U.S. National Maritime Intelligence Center (NMIC) and the maritime community from both nations.²⁵

2. Need to improve cooperation and coordination among Canadian and U.S. counterparts. In other words, bi-national MDA can be enhanced by the integration of exchange and liaison officers within Canadian and U.S. national military and interagency maritime centers. The CF maritime intelligence analysts working with the NORAD-U.S. Northern Command CIFC should be continuously posted to continue this important work.²⁶

3. Update the *Information Exchange Annex (IEA) to Multilateral Master Military Information Exchange MOU (M3IEM)* (dated 1 May 1997), which governs the tactical and operational exchange of information on naval tactical C4 systems among the American, British, Canadian, Australian and New Zealand (ABCANZ) navies. Ensure the updated IEA provides permission and incentives for sharing maritime information between Canada and the United States.

4. The superb work being facilitated by the MDA Implementation Team should be expanded to include Canadian representation from the Canadian Interdepartmental Marine Security Working Group (IMSWG) and Canada Command.

BACKGROUND AND DISCUSSION

The economic well-being of people in Canada, the United States and across the globe depends heavily upon the trade and commerce that traverses the oceans. Our nations have a common interest in two complementary objectives: “to facilitate the vibrant maritime commerce that underpins economic security, and to protect against ocean-related terrorist, hostile, criminal and dangerous acts.”²⁷ The majority of imports and exports being transported via ships follow the great circle routes (per Figure C-1), traveling through Canadian waters en route to the United States. Similarly, maritime shipments from Central and South America en route to Canada typically transit through U.S. waters. Based in part on these maritime routes and many other factors, it is in the interests of both nations to ensure timely sharing of maritime information since “the essence of sea power is the direct threat of danger to the continental homeland and the

immediate offshore areas is removed, or at least mitigated, by the ability to influence events far from home.”²⁸

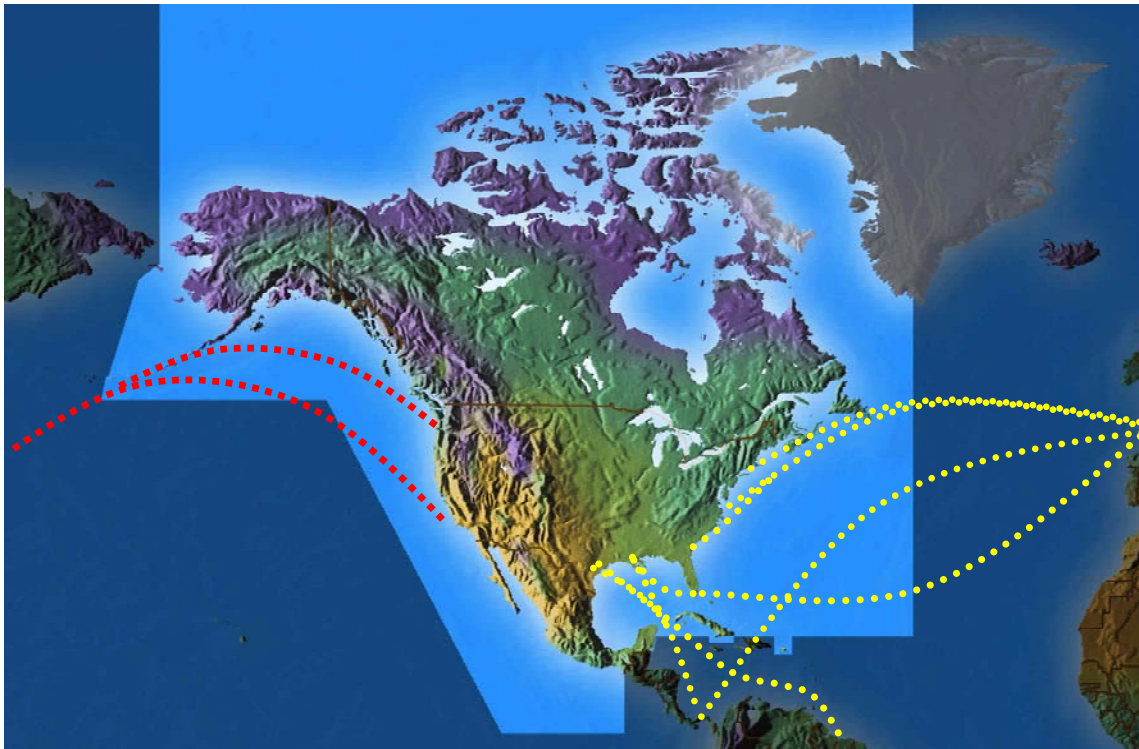


FIGURE C-1: GREAT CIRCLE ROUTES

In addition, the central reason for the establishment of NORAD was the increasing speed at which very lethal weapons could be delivered against North America.²⁹ This meant there was a new requirement for rapid warning and analysis of threats, and development of bi-national plans for immediate response since there was no longer time for formal negotiations or arrangements. This same compression of warning, analysis and response time may also exist for our maritime forces.³⁰ There may be very little warning of attack from the sea, hence, there is a new need for real-time sharing of (and acting cooperatively in a timely manner on) information about vessels of interest that are approaching North America.³¹ For instance, the warning time for sea-launched cruise missiles may be as little as 10 minutes. These events and threats can also pose exceedingly complex consequence-management problems that must be considered ahead of time as there will probably not be sufficient time to consider them during the event. In short, as in aerospace defense, there is no longer enough time to negotiate specific agreements for individual incidents where Canadian and U.S. maritime forces may need to be involved cooperatively in defense of our shores.³²

The Canadian Interdepartmental Marine Security Working Group (IMSWG) is led by Transport Canada and is the forum within Canada that is focused upon international marine security operations. In addition, the Canadian Marine Security Operations Centres (MSOCs) are headed by Canadian Forces Maritime Command, and includes staff from the Canada Border Service Agency (CBSA), Transport Canada, the Royal Canadian Mounted Police (RCMP) and the Canadian Coast Guard (over the fullness of time the MSOCs will fall under Canada Command).

Hence, IMSWG, supported by the MSOCs, will have the authority and capacity, through interagency staffing, to bring to bear all civilian and military resources necessary to detect, assess and respond to a marine security threat to Canada.

We will have significant improvement to bi-national coordination of on-water response to a marine threat or a developing crisis in Canadian and U.S. exclusive economic zones and along our coasts, once the MSOC is fully networked with the respective vessel traffic and communications systems, and with Canada Command, the U.S. DHS, USCG, U.S. Northern Command, the Office of Naval Intelligence and Fleet Forces Command. The Canadian maritime forces will also increase on-water patrols and aerial surveillance, and work even more closely with the United States Northern Command in protecting and defending our coasts and territorial waters.³³

This is especially important since 9/11, because the U.S. Coast Guard (USCG) missions of halting drug smuggling, illegal fishing and pollution have been eclipsed by new duties of protecting US maritime borders and waters from terror attacks. In addition, the USCG has been understaffed and under funded for years; it currently has half the ships and two-thirds of the aircraft it needs to protect the 95,000 miles of US shoreline. According to a RAND study the current force structure cannot meet the security demands of Global War on Terror (GWOT), hence:

- USCG should double its spending (\$8.5B to \$17B)
- Speed up its 20-year “Deepwater” modernization program
- USCG needs twice as many ships and a third more aircraft

The Canadian Navy has also had a very high operations tempo since 9/11 with every ship in the fleet deploying to support the Operations in Afghanistan and/or Global War on Terror initiatives. In October 2003, the Canadian Standing Senate Committee on National Security and Defence found that a “lack of appropriate coastal security and defence is a problem for Canadians, and for our American allies. The United States remains very much a target for international terrorists; it is clearly the bull’s eye. Canada, it is fair to say, is on the next ring out. We are so positioned because of our military bonds with America, our similar lifestyles, and our integrated markets.” Therefore, Maritime Domain Awareness remains a critical national defense and security issue for Canada and the United States, and is a mission area where both timeliness and savings can be achieved through cooperation.

TAB B. COUNTER INTELLIGENCE/INTELLIGENCE/LAW ENFORCEMENT (CI/I/LE) VISUALIZATION TOOL

“Lack of appropriate coastal security and defence is a problem for Canadians, and for our American allies. The United States remains very much a target for international terrorists; it is clearly the bull’s eye. Canada, it is fair to say, is on the next ring out. We are so positioned because of our military bonds with America, our similar lifestyles, and our integrated markets.”³⁴

INTRODUCTION

The BPG hosted a conference examining potential obstacles and impediments to bi-national information sharing. The intent was to better understand common concerns in the realm of sharing information between agencies across the Canada-US border. Fifty-eight representatives from twenty-five military and civilian organizations attended.

The conference objective was to identify and define key issues and challenges that require resolution for effective information sharing among Canadian and U.S. law enforcement, intelligence, and counterintelligence agencies involved in the security and defense of North America. This objective supported the Terms of Reference (TOR) tasks #3 and #7.

BOTTOM LINE UP FRONT

The BPG believes that the CI/I/LE Visualization Tool is an extremely useful tool that is readily accepted for its ability to improve information sharing and coordination throughout the security community. All who have seen it recognized the utility of the tool and agreed that it would be of benefit to their agency. However, no member of the community would commit to the monetary obligation of sponsoring the project so that it could continue to grow and remain a useful tool. The project has been shelved and will not progress unless a sponsor steps up to assume responsibility for and man the project. The visualization tool and the information gathered for it are stored in the BPG archives and remain available to anyone who needs the raw data.

RECOMMENDATIONS

The BPG encourages sponsorship of this Visualization Tool at the DND or DOD/Joint Staff level to obtain benefits of enterprise procurement/management to enhance bi-national information sharing coordination among all defense and security organizations.

BACKGROUND AND DISCUSSION

The BPG developed a prototype tool to create awareness and understanding of the organizational missions and information sharing relationships within the CI/I/LE community.

Concept of Operations. The CI/I/LE Visualization Mapping Tool was designed to present the associations and links between Canada and the United States CI/I/LE organizations, and to provide training information on roles and responsibilities of those organizations. The tool employs an intuitive visual browsing and searching capability easily accessed by the common user.

Visualization Mapping Tool Description. To assist in the prevention or mitigation of a terrorist event or natural disaster, the Visualization Mapping Tool has the potential to present a codified and coherent view of the formal and informal operational connections, agreements and structures that tie the members of the bi-national CI/LE community together in the shared purpose of defending the citizens of Canada and the United States. A data base of formal and informal CI/LE community relationships, and a distinctive and effective visualization tool, permits CI/LE community users to quickly browse the relationship database to review organizational connections, authorities, mandates, vision statements, organizational charts and contacts. A fully developed visualization mapping tool (see Figure C-2) would reside on the World Wide Web to allow CI/LE members to easily access the information available in the tool via the internet.

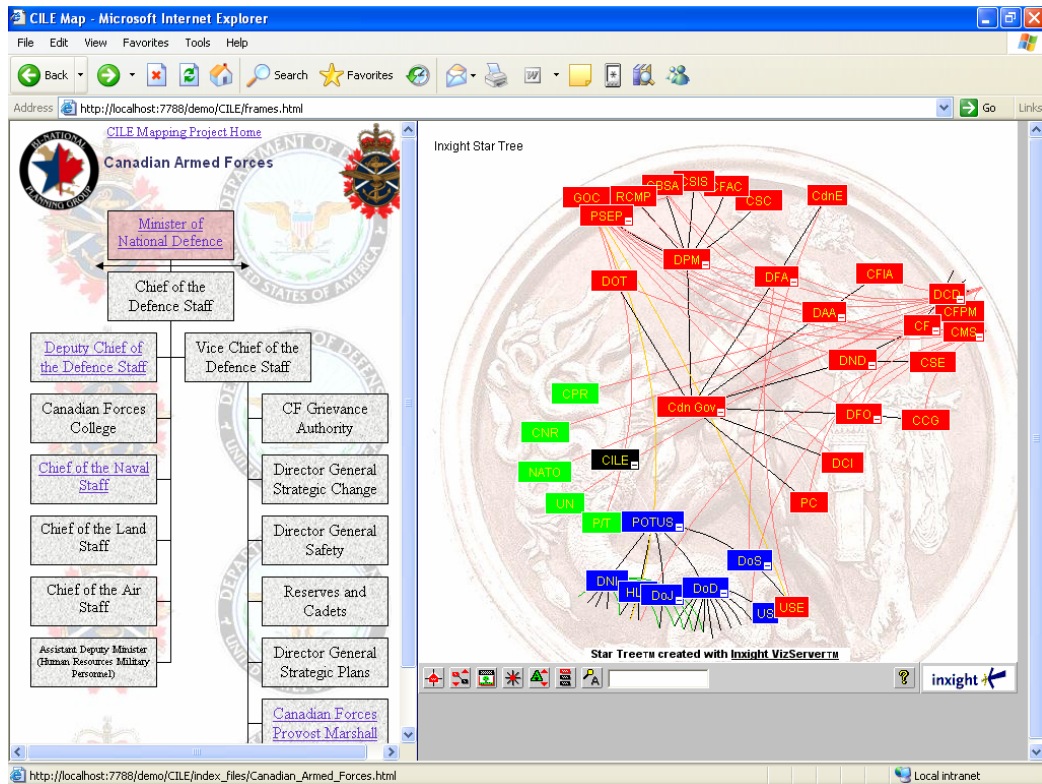


FIGURE C-2: CI/LE VISUALIZATION TOOL

Visualization Mapping Tool Roles. The sharing of timely and useful information between Canadian and United States CI/LE organizations is imperative since the 9/11 terrorist attacks. The tool's visibility of organizational associations and links would assist users in sharing information between organizations efficiently, whether it is military-to-military, civilian-to-military or civilian-to-civilian. Information is available to the user to give him a basic understanding of each organization in the CI/LE community.

- **Planning in Operational Level Staffs:** The visualization tool is also useful to operational planning staffs to ensure all appropriate organizations are included in operations nationally and bi-nationally. This would be of use to both civilian and military organizations as they grapple with quickly developing situations and a constantly changing community and organizations.

- Planning for Exercises: The visualization tool is useful for exercise and training planning staffs to ensure appropriate organizations are contacted nationally and bi-nationally and included in the planning.
- Use in Operations Centers: Use of the visualization tool by operational staffs will enhance operation center personnel in identifying all appropriate organizations for operations nationally and bi-nationally. Users can quickly browse the relationship database to review organizational connections, authorities, mandates, vision statements, organizational charts and contacts. With this visualization tool, an operator can quickly discern organization functions, appropriate contacts and contact roles. This would prove useful to both civilian and military organizations as they grapple with quickly developing situations and an ever changing CI/I/LE community.

Analysis of Seams and Gaps. The visualization tool would allow bi-national organizations to research information conduits between organizations and analyzes the information sharing paradigms, i.e. technical, political, formal, informal, etc. The desired outcome of this research was a recommendation to higher headquarters to improve the information sharing conduits.

Information Technical Network Connectivity. This capability, if fully developed, would allow researchers to identify which IT systems are accessible by other organizations. This visualization tool demonstrates where information flows through the IT networks and allows operators to contact other elements to ensure information flow to those organizations needing information to fulfill their duties in the prevention or mitigation of a terrorist event or respond to a natural disaster.

Expansion Capability. The product could be expanded to accommodate the large North American defense relationships and drill down to tactical level first responders. The system is fully adaptable to the changing nature of the CI/I/LE community, allowing it to remain relevant into the future.

Concept of Support. The visualization tool requires a sponsor to take on the maintenance of the project. The sponsor would need to meet the following criteria:

- A web presence to host the map; and
- Provide technical support to (1) keep the data base up to date, (2) check data accuracy, and (3) confirm research and focus on future development.

BPG analysts found wide acceptance of this visualization tool when demonstrated to representatives from many levels of government and civilian agencies; however, it was not adopted by any one government or civilian agency due to the maintenance and development requirements inherent with the constantly changing environment. The NORAD-U.S. Northern Command J6 planned to incorporate the visualization tool into the CARDESS command and control system, but has not due to the requirement for updating the database and a lack of funds. However, the information brought together by the BPG team has been added to the NORAD-U.S. Northern Command J4 Nexus project giving it law enforcement and Canadian content.

Appendix C Endnotes:

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- ¹ Steven E. Opfer, *The History of the Internet According to Itself: A Synthesis of Online Internet Histories*, Available at the Turn of the Century [Internet] (1999 [cited 19 April 2005]); available from <http://members.cox.net/opfer/Internet.htm>.
- ² *Canada/United States General Security of Information Agreement*, signed by the U.S. Secretary of State and the Canadian Ambassador to the United States on 30 January 1962, page 2.
- ³ Supported by the *Quadrennial Defense Review Report* dated 6 Feb 2006, page 51.
- ⁴ *Quadrennial Defense Review Report* dated 6 Feb 2006 identified the need for “capabilities and organizations to help fuse intelligence and operations to speed action based on time-sensitive intelligence” (page 23). Canada also identified that it “must improve how it gathers, tracks, analyzes, uses and shares information, particularly as it relates to the huge volume of air, land and sea activity within our areas of jurisdiction, and be better prepared to respond quickly and effectively to incidents” (*Canada’s International Policy Statement -Defence*, page 17).
- ⁵ This coincides the intent of the Quadrennial Defense Review Report dated 6 Feb 2006, page 27 and supports the aim of Canada’s International Policy Statement: Defence that states, “The Canadian Forces will enhance their role in defending the North American continent by (1) strengthening their ability to counter threats in Canada, especially in terms of monitoring and controlling activity in the air and maritime approaches to our territory; and (2) ensuring that maritime forces, both regular and reserve, cooperate even more closely with the U.S. Navy and Coast Guard (page 23) and that “The Forces will ... improve the gathering, analyzing, integrating and use of information gained from a combination of maritime, land, air and space surveillance systems” (page 17).
- ⁶ Canadian *International Policy Statement:-Defence*, page 13.
- ⁷ Canadian *International Policy Statement:-Defence*, page 12.
- ⁸ The 9-11 Commission Report (9/11 Rpt): *Final Report of the National Commission on Terrorist Attacks Upon the United States*, dated 5 August 2004, pages 321 & 417. Obtained from: <http://www.gpoaccess.gov/911>.
- ⁹ The 9-11 Commission Report (9/11 Rpt): *Final Report of the National Commission on Terrorist Attacks Upon the United States*, dated 5 August 2004, pages 88).
- ¹⁰ S. 2845, the *Intelligence Reform and Terrorism Prevention Act of 2004*, was passed in the House of Representatives on 12/07/04, with a vote of 336-75. It was passed in the Senate on 12/08/04, with a vote of 89-2; it was signed by the President Obtained on 17 Dec 2005, and available at http://www.gpoaccess.gov/serialset/creports/intel_reform.html.
- ¹¹ Remarks by President Bush Upon Departure for Quebec, Canada for the Summit of the Americas, April 20, 2001, located at <http://www.whitehouse.gov/news/releases/2001/04/20010420.html>. President Bush discusses strong relationship with Canada, at Halifax, Nova Scotia, Canada, on December 1, 2004. In addition to identifying Canada and the United States as strong allies and good friends, the President also stated, “Beyond the words of politicians and the natural disagreements that nations will have, our two peoples are one family, and always will be.” At <http://www.whitehouse.gov/news/releases/2004/12/20041201-4.html>. “Our common bond of values and mutual respect have created an alliance that is unsurpassed in strength and depth and potential.” Remarks by President Bush, November 30, 2004 at <http://www.whitehouse.gov/news/releases/2004/11/20041130-11.html>.
- ¹² Richard Fadden, Deputy Clerk, Counsel and Security, Intelligence Coordinator, Privy Council Office, in testimony to The Standing Senate Committee on National Security and Defence, February, 2002.
- ¹³ The Directorate of Intelligence, the analytical branch of the CIA, is responsible for the production and dissemination of all-source intelligence analysis on key foreign issues. Obtained on 12-22-2005 from web site: <http://www.cia.gov/cia/information/info.html>.
- ¹⁴ For a full description of FBI roles and responsibilities go to <http://www.fbi.gov>.
- ¹⁵ For a full description of USCG roles and responsibilities <http://www.uscg.mil/USCG.shtm>.
- ¹⁶ In the United States, an Intelligence Community (IC) member is a federal government agency, service, bureau, or other organization within the executive branch that plays a role in the business of national intelligence to include: Army, Navy, Air Force, and Marine Corps Intelligence Organizations, Central Intelligence Agency (CIA), Coast Guard Intelligence; Defense Intelligence Agency (DIA), Department of Energy (DoE), Department of Homeland Security (DHS), Department of State (DoS), Department of Treasury (DoT), Federal Bureau of Investigation (FBI), National Geospatial-Intelligence Agency (NGA), National Reconnaissance Office (NRO), National Security Agency (NSA). See www.intelligence.gov. Also, according to U.S. President Executive Order 12333, “The United States intelligence effort shall provide the President and the National Security Council with the necessary information on which to base decisions concerning the conduct and development of foreign, defense

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- and economic policy, and the protection of United States national interests from foreign security threats. All departments and agencies shall cooperate fully to fulfill this goal."
- ¹⁷ The NRO designs, builds and operates the nation's reconnaissance satellites. NRO products, provided to an expanding list of customers like the Central Intelligence Agency (CIA) and the Department of Defense (DOD), can warn of potential trouble spots around the world, help plan military operations, and monitor the environment. Obtained on 12-22-2005 from web site: <http://www.nro.gov/index.html>.
- ¹⁸ A principle finding of the 9/11 Commission is that federal agencies appeared to be doing their jobs, however the cross-talk or sharing of information among agencies was limited based upon the "need to know" paradigm.
- ¹⁹ *Canada – U.S. Partnership, Enhancing Our Common Security Workshop*. Hosted by the Institute for Foreign Policy Analysis (IFPA) and the Fletcher School, Tufts University on 14 March 2005, page 19. Obtained from: <http://www.ifpa.org/pdf/Canada-US-Report.pdf>.
- ²⁰ The U.S. *National Strategy for Maritime Security* (Sept 2005) defines the maritime domain as all areas and things of, on, under, relating to, adjacent to, or bordering on a sea, ocean, or other navigable waterway, including all maritime related activities, infrastructure, people, cargo, and vessels or other conveyances. The maritime domain for the United States includes the Great Lakes and all navigable inland waterways such as the Mississippi River and the Intra-Coastal Waterway. U.S. National Strategy for Maritime Security PDF version available at <http://www.whitehouse.gov/homeland/4844-nsms.pdf>.
- ²¹ Modified slightly to include Canada from the definition in NSPD-41 and HSPD-13; also in Joint Pub 3-32.
- ²² The U.S. *National Strategy for Maritime Security* (Sept 2005) states that "The United States, in cooperation with its allies, will lead an international effort to improve monitoring and enforcement capabilities through enhanced cooperation at the bilateral, regional, and global level" (p. 12) "But even an enhanced national effort is not sufficient. The challenges that remain ahead for the United States, the adversaries we confront, and the environment in which we operate compel us to strengthen our ties with allies and friends and to seek new partnerships with others. Therefore, international cooperation is critical to ensuring that lawful private and public activities in the maritime domain are protected from attack and hostile or unlawful exploitation (p 25)
- ²³ Supports the intent of the Quadrennial Defense Review Report dated 6 Feb 2006, which states "Just as the Second World War posed immense challenges that spurred joint and combined operations within the military, today's environment demands that all agencies of government become adept at integrating their efforts into a unified strategy" (QDR, page 83). "The Department must work hand in glove with other agencies to execute the National Security Strategy. Interagency and international combined operations truly are the new Joint operations. Supporting and enabling other agencies, working toward common objectives, and building the capacity of partners are indispensable elements of the Department's new missions" (QDR, page 83). This also supports Canada's International Policy Statement on Defence: "The Forces will ... improve the gathering, analyzing, integrating and use of information gained from a combination of maritime, land, air and space surveillance systems" (IPS, p. 17).
- ²⁴ Colonel (Ret) John Orr, a Research Fellow with the Centre for Foreign Policy Studies at Dalhousie University, aptly identified that "surveillance belongs to everyone and belongs to no one" and therefore should be championed by multiple stakeholders. As reported in *Continental Security and Canada-U.S. Relations: Maritime Perspectives, Challenges, and Opportunities*, 20-22 June 2003, <http://centreforforeignpolicystudies.dal.ca/pdf/2003confrep.pdf>.
- ²⁵ This recommendation supports the U.S. *National Strategy for Maritime Security* (Sep 2005), (page 14), at <http://www.whitehouse.gov/homeland/4844-nsms.pdf>. And it supports the intent of the Quadrennial Defense Review Report dated 6 Feb 2006 that says DOD "seeks to improve the homeland defense and consequence management capabilities of its national and international partners (such as Canada) and to improve the Department's capabilities by sharing information, expertise and technology as appropriate across military and civilian boundaries.(page 27) It also supports the Canadian International Policy Statement on Defense aim to "improve the gathering, analyzing, integrating and use of information gained from a combination of maritime, land, air and space surveillance systems" (IPS-Defence, page 17).
- ²⁶ BPG developed a maritime awareness concept that provides information sharing and awareness on VOI, as a temporary work-around for maritime awareness. This proof-of-concept positioned a CF Maritime Intelligence Analyst, inside the CIFIC, who works closely with an American Maritime Intelligence Analyst. Combined information on the VOI is then provided to the Canadian National Defence Command Center (NDCC) and the U.S. Joint Operations Center (JOC).
- ²⁷ U.S. *National Strategy for Maritime Security* (Sep 2005), (page 2), at <http://www.whitehouse.gov/homeland/4844-nsms.pdf>
- ²⁸ Maddison, G.R. *Leadmark: The Navy's Strategy for 2020. A Summary*.
- ²⁹ Dwight N. Mason, former U.S. Chair to the PJBD, in "What Canadian Military and Security Forces in the Future World? A Maritime Perspective," A Conference hosted by the Centre for Foreign Policy Studies <www.cfps.dal.ca> Dalhousie University, 10 June 2005, *Managing North American Defense at Home*, wrote "NORAD was established in response to a new kind of threat ... The speed with which these attacks could come -

combined with their potential lethality - created a situation where traditional methods of detection and a subsequent negotiated response to individual incidents were no longer possible. There was simply not enough time. With NORAD, Canada and the United States created an integrated and bi-national system that permitted immediate action by both countries.”

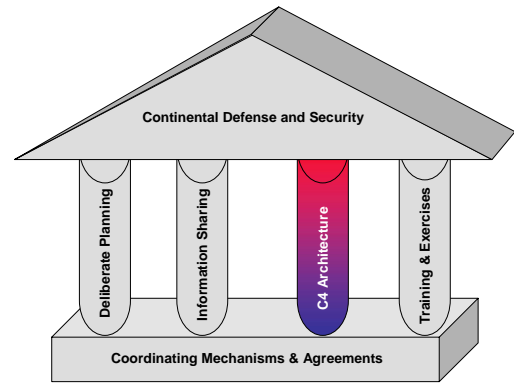
³⁰ “Based on the demonstrated ease with which uncooperative states and non-state actors can conceal WMD programs and related activities, the United States, its allies and partners must expect further intelligence gaps and surprises” (Quadrennial Defense Review Report dated 6 Feb 2006, page 33).

³¹ Canada expressed the desire to work more closely with the United States in a number of security and defence areas including “(1) preventing or mitigating the impact of potential maritime attacks by: (a) increasing bi-national maritime surveillance activities, and (b) enhancing the sharing of maritime intelligence, information and assessments to better advise and warn both governments; and (2) improving our ability to respond to maritime crises, on a case-by-case basis, with the formal approval of both governments” per Canadian International Policy Statement: -Defence, page 22 and 23). This complements the U.S. *Quadrennial Defense Review Report* dated 6 Feb 2006: “As set forth in the Defense Department’s National Maritime Security Policy and in the Strategy for Homeland Defense and Civil Support, the Department’s strategic goal for homeland defense is to secure the United States from direct attack. To achieve this goal, the Department will work as part of an interagency effort, with the Department of Homeland Security and other Federal, state and local agencies, to address threats to the U.S. homeland. Protecting the U.S. homeland requires an active and layered defense strategy. The strategy emphasizes partnerships with neighboring states and allies (specifically Canada), as well as with other Federal, state and local agencies.” (QDR, page 25).

³² Dwight N. Mason, former U.S. Chair to the PJBD, in *Canadian Defense Priorities: What Might the United States Like to See?* Center for Strategic and International Studies (CSIS), Policy Papers on the Americas, Volume XV, Study 1, dated March 2004, at www.csis.org.

³³ *Canada’s International Policy Statement, A Role of Pride and Influence in the World*, page 16, released 19 April 2005 and obtained from: <http://www.dfait-maeci.gc.ca/cip-pic/ips/overview-en.asp>.

³⁴ Standing Senate Committee on National Security and Defence, Oct 2003.



APPENDIX D: BACKGROUND AND DISCUSSION SUPPORTING CHAPTER 4. COMMAND, CONTROL, COMMUNICATIONS AND COMPUTER (C4) ARCHITECTURE AND INTEROPERABILITY

Network-centric warfare (NCW) broadly describes the combination of strategies, emerging tactics, techniques and procedures, and organizations that a fully or even a partially networked force can employ to create a decisive defense and security advantage. A CANUS networked force that conducts network-centric operations (NCO) enables the conduct of North American effects-based operations (EBO), which are sets of actions directed at shaping the behavior of friends, neutrals and foes in peace, crisis and war.

“Recent operational experiences in Afghanistan and Iraq have demonstrated the value of net-centric operations...Achieving the full potential of net-centricity requires viewing information as an enterprise asset to be shared and as a weapon system to be protected. As an enterprise asset, the collection and dissemination of information should be managed by portfolios of capabilities that cut across legacy stove-piped systems”¹

“NCW and NCO in a coalition or alliance environment may ultimately hinge on information releaseability rules and the ability to send information between networks with different security classifications.”² Unless Canada and U.S. initiate a Comprehensive Defense and Security Agreement (CDSA) implemented in part by a CANUS Information Sharing Agreement with this focus (per Chapter 3, recommendation 1), information exchange for the foreseeable future, using three levels of classification (UNCLASSIFIED, SECRET, and TOP SECRET), will continue on three *separate* national computer networks, thereby sustaining inherent stove-pipe inefficiencies.³ A more optimal condition would permit Canadian and U.S. personnel to work on national Command and Control (C2) systems in a cross-domain environment. Figure D-1 below is a symbolic example of the current environment and is explained in the paragraphs that follow the figure.

The bi-national connectivity environment for our militaries is separated into three spheres: UNCLASSIFIED, SECRET (NORAD and non-NORAD) and TOP SECRET. The DND and DOD unclassified environment reside on the Internet using the Canadian Defence Wide Area Network (DWAN) and U.S. Non-secure Internet Protocol Router Network (NIPRNET). Due to security reasons, the Canadian Defense Information Network (DIN) is not accessible to the general public (from private Internet Service Providers [ISPs]). Access to the DIN is limited to DWAN workstations/laptops with DND/CF Secure Remote Access (SRA). Similarly, the U.S. Secure Internet Protocol Router Network (SIPRNET) has protection protocols built into it as well. However, users of DWAN and NIPRNET can exchange information freely.

At Peterson Air Force Base, the secret information environment is divided into the NORAD and non-NORAD networks. The NORAD Enterprise Network is used for information that is Releasable to Canada and the United States (RELCANUS). The NORAD Enterprise Network is a bi-national network owned by the U.S. Air Force, and it provides limited bilateral connectivity among NORAD nodes. Although this is a safe and secure system for email transmission, the limited deployment of this system makes utilization outside of NORAD marginal at best. Hence, there is a need to create linkages between the classified U.S. SIPRNET and the Canadian TITAN systems. In Figure D-1, the light-gray colored GRIFFIN⁴ circle provides a representation of the efforts to populate TITAN and potential SIPRNET users. The Canadian Forces are pressing forward by providing TITAN users with GRIFFIN capability—the BPG encourages U.S. Northern Command adoption and sponsorship.⁵ This will provide connectivity between U.S. Northern Command and Canada Command’s classified systems. Finally, at the TOP SECRET level, the black ellipse in this figure represents an opportunity to connect the intelligence-sharing community with a GRIFFIN-like capability.

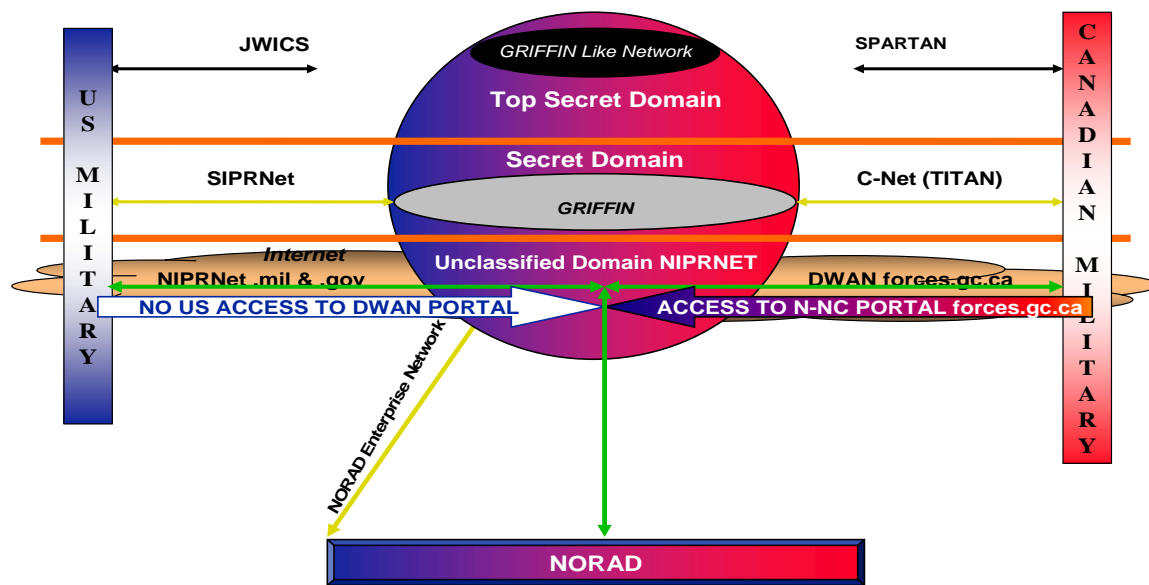


FIGURE D-1: BI-NATIONAL C4ISR ENVIRONMENT

There is a need for ongoing analysis regarding information exchange in a CANUS environment. However, an information exchange capability in an unclassified environment should also support non-military government departments and agencies. The initial assessment (per Chapter 4, recommendation 2) must be coordinated across a spectrum of North American defense and security partners who have a vested interest in current bi-national capabilities and baseline shared information exchange criteria capabilities using the following assessment methodology:⁶

1. Identify mission essential information exchange functions and methods for communications and computer capabilities to support C2.
2. Conduct comparison assessment of current and ideal capabilities to establish baseline.
3. Identify current/future Canadian and U.S. projects which may/will impact CANUS C4 capabilities.
4. Conduct comparison assessment of baseline and future capabilities.
5. Provide recommendations for C4 improvements based on the assessment.

An initial concept of operations (CONOPS) must be developed that addresses who is connected to whom, what kind of information must be passed from one user to another, and the services needed for first defenders and first responders for combined operations.⁷ This CONOPS will be incomplete if it is focused only upon military organizations. Therefore, per recommendation #2.c., a communications architecture is needed that creates interoperability among the militaries, the Canadian and U.S. local, provincial/ state and federal emergency responders, and supports PSEPC and DHS.⁸

Chapter 2 of this report discussed the creation of a Canada-U.S Civil Assistance Plan (CAP), where the militaries would assist one another in consequence management activities. The success of the CAP, as well as the Combined Defense Plan (CDP), hinge upon interoperable communications, which become even more complex when trying to interface civilian and military organizations. Therefore, Canada Command and U.S. Northern Command should study the best means to automate and link key planning processes in a networked, virtual environment to enable real-time collaboration and rapid production of high-quality planning products.⁹

Communication among emergency personnel is important in any disaster; however, interoperable communications have continued to remain a challenge:

- The after action report (AAR) from the Alfred P. Murrah federal building bombing, which occurred on 19 April 1995 in Oklahoma City, Oklahoma, identified that “Due to the initial chaos following the explosion and non-emergency services transmissions, communications capabilities from the disaster site and between response agencies were limited at best.”¹⁰
- The Arlington County AAR on the response to the 11 September 2001 terrorist attack on the Pentagon identified that “all area communications seemed simultaneously overwhelmed.”¹¹
- The New York City Police Department 9/11 AAR determined that responders were highly reliant on cell phones, which were mostly inoperable because of system overload and infrastructure damage.
- Similarly, in September 2005, Hurricane Katrina knocked out a wide variety of communications infrastructure.¹² This emphasized a need to achieve communications interoperability among all entities at all levels of government and with international responders such as Canada.

Hence, this historical trend of communications overload related to catastrophic events and the inability to communicate between civilian and military organizations must be corrected before the next catastrophic incident. The Alaskan Land Mobile Radio Project and the North Atlantic

Treaty Organization (NATO) Networked Enabled Capability (NEC) feasibility study are good information sharing and collaboration type models for consideration. CANUS bi-national information sharing transformation efforts should consider these, or other, models as defense and security coalition options to making information sharing and collaboration better.

For reference, the Alaskan Land Mobile Radio project model advocates a better state, provincial, and appropriate federal agency connectivity while the North Atlantic Treaty Organization initiative advocates aligning coalition forces to foster seamless data-sharing with coalition partners. Our summary describes both initiatives that should be appropriately exploited by Canada and the United States to enhance cooperation, information sharing, and connectivity.

The Alaskan Land Mobile Radio (ALMR) Project

Whether in a mode of defending the entire continent from external attack or providing support to civil authorities, there will always be a need to communicate between local, state/provincial and federal entities. The difficulties identified in the preceding paragraphs include the inability to share classified information between the Canadian and U.S. militaries, without additional mechanisms, depicted in Figure D-1. In addition, we must also include the ability of military responders to communicate with civilian agencies. The most critical need is to provide immediate, on demand and real time secure interoperability between federal, state/province and local first responders. The Mobile Emergency Response Centers (MERS) support the Department of Homeland Security - Federal Emergency Management Agency (DHS-FEMA) in consequence management. However, whenever the Canadian and/or U.S. military are called upon to provide support to civil agencies, there must be civil-military interoperability as well.

DESIGNATION	FREQUENCY			
Very Low Frequency (VLF)	10 kHz to 30 kHz			
Low Frequency (LF)	30 kHz to 300 kHz			
Medium Frequency (MF)	300 kHz to 3 MHz			
High Frequency (HF)	3 MHz to 30 MHz			
Very High Frequency (VHF)	30 MHz to 144 MHz	U.S. Coast Guard	VHF	Maritime Freq
	144 MHz to 174 MHz	AK State Troopers	VHF	154-165 MHz
	174 MHz to 328.6 MHz			
Ultra High Frequency (UHF)	328.6 MHz to 450 MHz	U.S. Military	UHF	406-420 MHz
	450 MHz to 470 MHz	AK Fire/EMS	UHF	450 MHz
	470 MHz to 806 MHz	AK Police	UHF	800 MHz
	806 MHz to 960 MHz			
	960 MHz to 2.3 GHz			
	2.3 GHz to 2.9 GHz			
Super High Frequency (SHF)	2.9 GHz to 30 GHz			
Extremely High Frequency	30 GHz and above			

FIGURE D-2: FREQUENCY SPECTRUM

Communications interoperability is an essential communications link, which permit units from two or more different entities to interact with one another and to exchange information according to a prescribed method to achieve predictable results. This is not easy to achieve in one nation, and can be more difficult to achieve in a multi-national environment. Hence, once the policy initiatives for the second pillar (described in Chapter 2) are attained, and the bi-national

information sharing agreements are in place between Canada and the United States (described in Chapter 3), then the tougher task of communications interoperability can be fully developed.

Using ALMR data as an example, the U.S. Coast Guard and the Alaska State Troopers both operate in very high frequency (VHF) spectrum. Similarly, the U.S. military, Alaskan fire, emergency medical services, and police work in the ultra high frequency (UHF) band. However, as shown on this chart (shown in Figure D-2), all five entities operate within different portions of the VHF and UHF bands. The ALMR initiative will ensure interoperability among all five organizations.

<u>Canadian Primary Department</u>	<u>ESF</u>
Agriculture and Agri-Food Canada	Food and Agriculture
Environment Canada	Hazardous Materials
Finance Canada	Financial
Fisheries and Oceans	Fisheries and Oceans Management
Foreign Affairs	International Coordination
Health Canada	Health and Social Services
Human Resources Development Canada	Human Resources
Industry Canada (Telecomm)	Telecommunications
National Defence	Logistics Operations Management
Public Safety and Emergency Preparedness (PSEP)	Heavy Urban Search and Rescue
PSEP - Solicitor General Canada	Public Order
Public Works and Government Services Canada	Engineering and Construction Resources
"	Procurement
Transport Canada	Transportation

<u>U.S. Primary ESF Coordinator</u>	<u>ESF</u>
Department of Agriculture / Forest Service	Firefighting (ESF 4)
Department of Agriculture/Department of Interior	Agriculture and Natural Resources (ESF 11)
Department of Energy	Energy (ESF 12)
Department of Health and Human Services	Health and Medical Services (ESF 8)
Department of Homeland Security (DHS)	Communications (ESF 2)
"	Information and Planning (ESF 5)
"	Urban Search and Rescue (ESF 9)
"	Long Term Community Recovery (ESF 14)
"	External Affairs Annex (ESF 15)
Department of Transportation	Transportation (ESF 1)
DHS and American Red Cross	Mass Care, Housing and Human Services (ESF 6)
DHS and Department of Justice	Public Safety and Security (ESF 13)
Environmental Protection Agency	Hazardous Materials (ESF 10)
General Services Administration	Resource Support (ESF 7)
U.S. Army Corps of Engineers	Public Works and Engineering (ESF 3)

FIGURE D-3: EMERGENCY SUPPORT FUNCTION (ESF) COMPARISON

Canada Command and U.S. Northern Command both have missions to provide civil support in the event of a natural disaster or attack. Therefore, much can be learned from the ALMR Project, using “best practices” to ensure that lessons learned from the ALMR are cloned in other locales. In addition, once Canada Command is fully operational then U.S. Northern Command and Canada Command can develop critical bi-national initiatives that will enhance C4 architecture interoperability for defense or civil support. However, this is a complicated issue since the different Canadian and U.S. departments and agencies have different emergency support function (ESF) responsibilities as shown in Figure D-3.

The organizational alignment between Canada and the United States as shown in Figure D-3, are not completely synchronous across all of the Emergency Support Functions. Therefore, the communications interoperability in a multi-agency/department/national environment is complicated as well. Industry Canada (Telecom) and the U.S. Department of Homeland Security have lead roles in communications (per Figure D-3); however, the synchronization of CANUS civil-military operations needs continuous improvement. Therefore, other initiatives should continue to be investigated and, as applicable, implemented. Another initiative is discussed below.

North Atlantic Treaty Organization (NATO) Initiative

In November 2003, nine NATO countries (Canada, France, Germany, Italy, the Netherlands, Norway, Spain, the United Kingdom and the United States) agreed to fund a feasibility study on the NATO Networked Enabled Capability (NNEC) as an important step towards NATO’s transformation. Belgium, Denmark and Turkey subsequently joined this effort, and the study was initiated in January 2004. These countries have been working particularly closely with the U.S. in exchanging ideas on how to organize, train and equip their forces in order to permit seamless data-sharing with U.S. forces when operating in such coalition endeavors as the peacekeeping operations in the Balkans and Afghanistan, current stability operations in Iraq or multinational maritime interdiction operations.

This NCW/NCO concept is not unique to the United States since Canadian Forces have also participated in and contributed to the NCO-international concept development with the NNEC feasibility study. Both Canada and the U.S. seek to maximize the positive utility and transformational benefit of network related phenomena and an effects-based approach without overlooking their potential limits and adverse consequences. Hence, both nations seek to maximize network-based interoperability both internally, with other government departments and with each other. Full attainment of this potential extends beyond simply the technical and communications challenges, to include all elements of capability—such as doctrine, organization, training and culture—and the widest possible integration of the elements of national power and influence.¹³ Quadrennial Defense Review Report dated 6 Feb 2006 articulated a Joint Command and Control – Vision whereby,

“The joint force of the future will have more robust and coherent joint command and control capabilities. Rapidly deployable, standing joint task force headquarters will be available to the Combatant Commanders in greater numbers to meet the range of potential contingencies. These headquarters will enable the real-time synthesis of operations and intelligence functions and processes, increasing joint force adaptability

and speed of action. The joint headquarters will have better information, processes and tools to design and conduct network-enabled operations with other agencies and with international partners”¹⁴

However the Canadian Transformation Guidance identifies that:

“First, we must transform the way we perceive and think ... We are moving from an industrial, hierarchical mode of thinking to a world powered by collaborative human networks. We must learn to think, behave, and act as a node in a collaborative network that includes our war fighters, all three military environments, our civilian colleagues in the department and broader public security portfolio, as well as our allies.”¹⁵

The resource-related implications of military transformation compel a degree of pragmatism insofar as implementation among the Canadian Forces and U.S. military organizations are concerned. Near term opportunities among NORAD, Canada Command and U.S. Northern Command should be exploited so that NCO is the norm among these organizations. However, in the near term, defensive information operations (DIO), as a mission enabler, should become a shared priority among all three commands. Additional information on DIO is provided in Tab A.

TAB A: DEFENSIVE INFORMATION OPERATIONS (DIO)

PURPOSE: “Addresses whether, as part of Bi-national mission assurance, should defensive information operations (DIO)¹⁶ or Cyber-Security, between Canadian and U.S. military information systems should be pursued?”

SUMMARY.

Within NORAD CONPLAN 3310, bi-national defensive information operations (DIO) and cyber-security are centrally directed and unilaterally executed (each country executes IAW national plans/orders). Currently planning and development is coordinated and worked through the Military Cooperation Committee Information Operations Working Group (MCC IO WG).

RECOMMENDATION.

Recommend the MCC IO WG (or other appropriate body) continue to execute its function in conjunction with NORAD, Canada Command and U.S. Northern Command participants.

DISCUSSION.

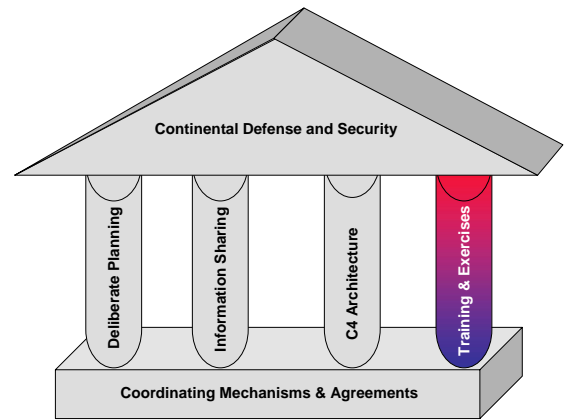
To implement a continental approach to defense and security, there is a need for joint and combined command and control capabilities that are survivable in the face of cyber-attacks.¹⁷ Critical Infrastructure Protection (CIP)¹⁸ directives mandate a national effort to ensure the security of the increasingly vulnerable and interconnected infrastructures of the United States, and by extension Canada.¹⁹ Such infrastructures include telecommunications, banking and finance, energy, transportation and essential government services. The directive requires immediate federal government action, including risk assessment and planning, to reduce exposure to attack. It stresses the critical importance of cooperation between the government and the private sector by linking designated agencies with private sector representatives. This is also applicable to a broader North American community of interest (COI) since Canadian and U.S. telecommunications are vulnerable to shared threats.

Currently, many systems are unilateral in nature and present a one-sided IO sensitivity. NORAD is a bi-national command activity using U.S. owned systems, and such sensitivity does not exist. Military defensive information operations (often referred to as cyber defense) employ commercial IO tools. A Canada-U.S. military and intergovernmental effort should be considered that best connects North American's first defenders and first responder community of interest (COI). Information assurance²⁰ goals should consider information protection and defence, and the defence of shared systems supported by a CANUS IO agreement or memorandum of understanding that fosters trusted²¹ information availability and that plans for systems restoration that incorporates protection, detection and reaction capabilities.

Appendix D Notes:

- ¹ Quadrennial Defense Review Report, dated 6 Feb 2006, page 58.
- ² Dr. Paul Mitchell, “Small Navies and Network Centric Warfare: Is there a Role?” (unpublished paper), Toronto: Canadian Forces College, March, 2002.
- ³ Dr. Paul Mitchell, Canadian Forces College, identified this theme during Panel 6—Information Sharing in Peacekeeping Intelligence at Carleton University’s Conference on Peacekeeping Intelligence—New Players, Extended Boundaries on 5 December 2003: “Problems in peacekeeping immediately arise when two different intelligence networks are maintained—a classified level for the US and an unclassified level for the rest of the coalition.”
- ⁴ GRIFFIN is a strategic level operation solution to link Defence Headquarters of the Multinational Interoperability Council member nations (Australia, Canada, New Zealand, United Kingdom, United States, France and Germany). The concept was initiated by the member nations’ senior military J3s.
- ⁵ The Combined Communications Electronic Board (CCEB) established the Combined Wide Area Network Working Group (CWAN WG) in Jun 00 to deliver a classified SECRET information exchange capability for Australia, Canada, New Zealand, the United Kingdom and the United States. The intent of this capability was to offer information exchange between each nation’s existing command and control (C2) system. The initial operating capability (IOC) of SECRET e-mail with attachments was achieved on 18 Dec 02 by Canada and the U.S. As of 12 Sep 03, all CCEB nations have achieved the GRIFFIN capability. Additional GRIFFIN capabilities continue to be investigated and implemented.
- ⁶ The essential capabilities criteria break out follows:
- Command and Control** providing direction, decision and execution capability using: (1) DMS message handling, (2) (C)DRSN/STU/STE secure voice, (3) event logging, (4) telephone voice, and (5) voice over internet provider.
 - Collaboration** regarding options, course of action considerations and providing warning order guidance capability using: (1) desktop tool set of collaborative tools such as file sharing, conference and white board, (2) DMS message handling, (3) STU/STE secure voice, (4) voice over internet provider, (5) video teleconferencing, (6) web access.
 - Coordination**, assessment, information validation, planning and providing alert order guidance capability using: (1) desktop tool set of collaborative tools with file sharing, conference, and white board, (2) COP, (3) DMS message handling, (4) Email, (5) event logging, (6) STU/STE secure voice, (7) telephone voice, (8) voice over internet provider, (9) video teleconferencing and (10) web access.
 - Information sharing** fostering situational awareness capability using: (1) COP, (2) Email, (3) file sharing, (4) telephone voice, (5) voice over internet provider, (6) web access.
- ⁷ Combined is defined as two or more nations or intergovernmental agencies acting together to accomplish a common mission.
- ⁸ DHS has lead responsibility for interoperability among emergency responders, while DOD has responsibility to plan for military support to civil authorities. Government Accountability Office Report, GAO-05-33, *Homeland Security: Agency Plans, Implementation and Challenges Regarding the National Strategy for Homeland Security*, identified that the “Wireless Public safety Interoperable Communications Program (or SAFECOM) has had very limited progress in achieving communications interoperability among all entities at all levels of government.” (page 117). Available at www.gao.gov/cgi-bin/getrpt?GAO-05-33.
- ⁹ Supported by Quadrennial Defense Review Report, dated 6 Feb 2006, page 60.
- ¹⁰ Catherine Manzi, Michael J. Powers, Kristina Zetterlund, of the Chemical and Biological Arms Control Institute (CBACI), wrote a case study on critical information flows and identified that response agencies and the media quickly discovered that landline phone connections were needed to support fax machines, computer modems and secure communications. In fact, in the early hours of the response, the incident support team needed nearly 50 landline connections to support the rescue operations center at the Murrah Building. Police, Fire, EMSA, and other city departments could not communicate directly with each other by radio because each used different frequencies. As a result, some officials described radio communications as fragmented, with messages being relayed from one agency radio system to another, and losing some of the meaning in the process. Face-to-face messaging and cellular telephones (once restored) thus became critical in supporting interagency communication. The two-way radio provided dependable, but unsecured, voice communication throughout the rescue effort. Available at: <http://www.cbaci.org>.
- ¹¹ The Arlington County AAR on the Response to the September 11 Terrorist Attack on the Pentagon describes the activities of the Arlington county and the supporting jurisdictions, government agencies and other organizations in response to the September 11, 2001 terrorist attack on the Pentagon. A critical finding in the report was that “the 9-1-1- system was overwhelmed” and that “radio traffic overwhelmed the system to the extent that foot messengers became the most reliable means of communicating” (page A35 and 36).
- ¹² Government Accountability Office Report, GAO-05-1053T, *Hurricane Katrina, Providing Oversight of the Nation’s Preparedness, Response, and Recovery Activities*, dated 28 Sept 2005, at www.gao.gov/cgi-bin/getrpt?GAO-05-1053T, found that “Hurricane Katrina knocked out radio and television stations, more than 3 million customer phone lines, and more than a thousand cell phone sites.”
- ¹³ A critical, unrealized goal of *Strategy 2020—Canadian Defence into the 21st Century* was to “strengthen our military relationship with the US military to ensure Canadian and US forces are inter-operable and capable of combined operations in key selected areas.” Available at http://www.cds.forces.gc.ca/pubs/strategy2k/intro_e.asp.
- ¹⁴ Quadrennial Defense Review Report, dated 6 Feb 2006, page 59.

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- ¹⁵ Annual Report of the Chief of the Defence Staff, available at http://www.cds.forces.gc.ca/pubs/anrpt2003/intro_e.asp.
- ¹⁶ DIO is the integration and coordination of policies and procedures, operations, personnel, and technology to protect and defend information and information systems. Defensive information operations are conducted through information assurance, physical security, operations security, counter-deception, counter-psychological operations, counterintelligence, electronic warfare, and special information operations. Defensive information operations ensure timely, accurate, and relevant information access while denying adversaries the opportunity to exploit friendly information and information systems for their own purposes. In this particular section, only CANUS defensive actions are emphasized.
- ¹⁷ Supported by Quadrennial Defense Review Report, dated 6 Feb 2006, page 31-2.
- ¹⁸ The Critical Infrastructure Protection directive (PDD-63) calls for a national effort to ensure the security of the increasingly vulnerable and interconnected infrastructures of the United States. Such infrastructures include telecommunications, banking and finance, energy, transportation and essential government services. The directive requires immediate federal government action, including risk assessment and planning to reduce exposure to attack. It stresses the critical importance of cooperation between the government and the private sector by linking designated agencies with private sector representatives.
- ¹⁹ Canadian transformation goals require the Canadian Forces to “update their command, control, communications, computers, intelligence, surveillance, and reconnaissance capabilities (C4ISR). The rapid acquisition and sharing of information will be critical to future operations. Commanders and subordinates at every level need to know what is happening before they can respond to incidents. The Forces will increase the quality and quantity of information and intelligence so that they can make the timely decisions essential for success” (International Policy Statement on -Defence, page 11-12). This cannot be achieved without combined coordination on cyber-security issues.
- ²⁰ Definition of Information Assurance (IA): “Information operations that protect and defend information and information systems by ensuring their availability, integrity, authentication, confidentiality, and non-repudiation. This includes providing for restoration of information systems by incorporating protection, detection, and reaction capabilities” (NSTISSI 4009, August, 1997).
- ²¹ Trusted information is sound and honest information that contributes to the fulfillment of mission participants. Trusted information allows non-corrupted information flow that fosters agencies discharge of duties.



**APPENDIX E: BACKGROUND AND DISCUSSION SUPPORTING
CHAPTER 5. EXERCISES, TRAINING, AND VALIDATION**

The current *Canadian Forces Strategic Collective Training Plan* (SCTP) is being replaced by the *Canadian Forces Integrated Training Directive*. This Chief of the Defence Staff (CDS)-approved document will provide the direction, resources and requirements for all strategic and collective training for the CF, in particular, Canada Command and its joint task forces (JTFs). The new *Canadian Forces Integrated Training Directive* should be published with a view toward increasing CANUS interoperability. As Figure E-1 shows, CANUS training and exercises are an integral part of the strategic planning process by providing an essential feedback loop to improve CANUS deliberate plans.¹

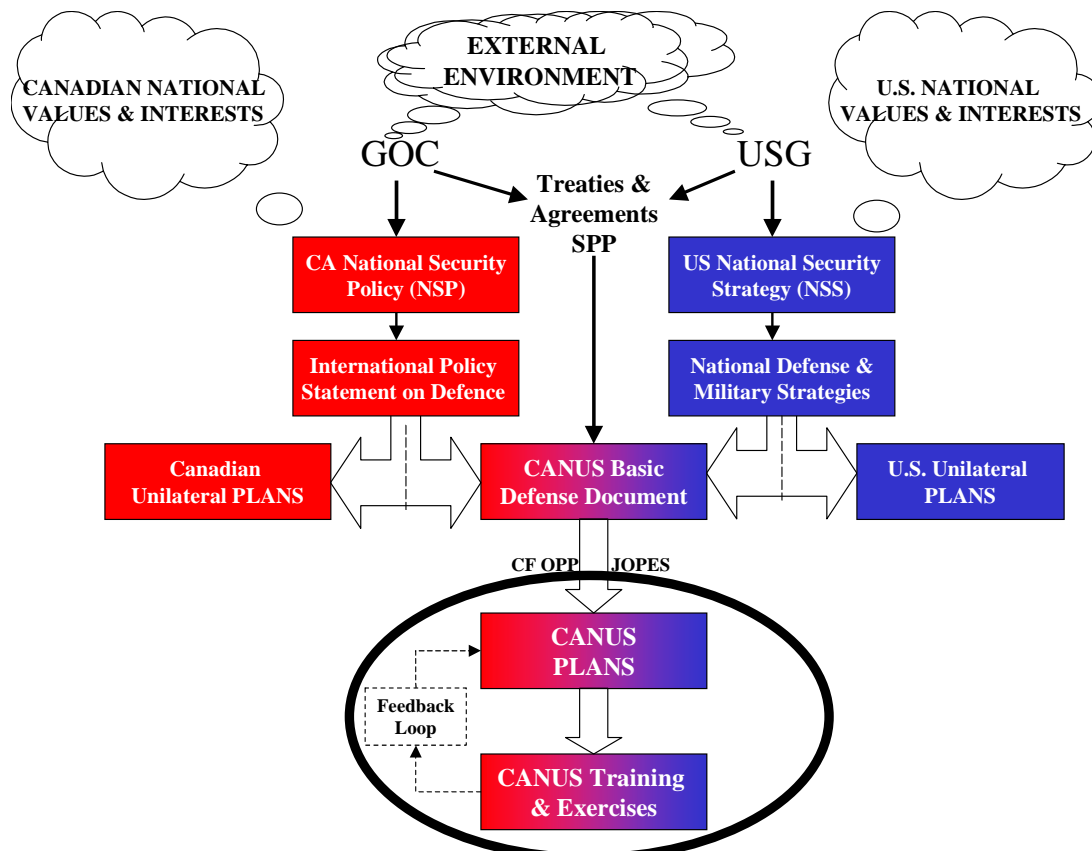


FIGURE E-1: TRAINING AND EXERCISES

As Canada Command evolves and the subordinate Joint Task Forces (JTFs) across Canada become fully operational, the linkages between the NORAD and U.S. Northern Command Combined and Joint Mission Essential Task Lists (CJMETLs)² for HLS and HLD will become more obvious. This will facilitate the development of a common benchmark for use in combined NORAD, U.S. Northern Command and/or Canada Command exercise programs. The use of common performance evaluation criteria will greatly increase the evaluation and hence the validity of CANUS plans and exercises. The Canadian Joint Task List (CJTL) and U.S. Universal Joint Task List (UJTL) are very similar in scope (see Figure E-2 for a comparison of the U.S. UJTL and CF CJTL tasks). Therefore, using the CJTL and UJTL as benchmarks will enable the critical tasks required for the seamless defense of Canada and the United States to be trained, exercised and rehearsed as per Chapter 5, recommendation 1.

The task list for Canada Command and U.S. Northern Command will be supportive of the goals and objectives of the civilian organizations that they are mandated to support: PSEPC, DHS and potentially the Department of Justice (DOJ). Development and use of a CJMETL offers the potential for synergy at an unprecedented level, whether it is in the realm of the civilian-military interface or simply between the militaries. This supports the CDS Vision as well as the DOD Training Transformation Vision, which focuses upon providing a “dynamic, capabilities-based training for the Department of Defense in support of national security requirements across the full spectrum of service, joint, interagency, intergovernmental, and multinational operations.” It also supports the *Canadian Strategic Collective Training Guidance 2004*, which articulates specific strategic collective training objectives (CTOs), including “Defence of North America Operations in conjunction with U.S. Forces and [is in accordance with] CANUS Op Plans.”³ Two CTO sub-tasks include:

CTO 021—Defend Canadian and U.S. territory, *in cooperation with U.S. forces*, against potential threats to security.

CTO 022—Conduct operations and exercises *in concert with U.S. forces* in a bilateral or multilateral context.

Assuming that these CTOs will be allocated sufficient resources (time, money and personnel), CANUS training and exercises *will* be enhanced. However, the key to continuous improvement would be routinely scheduled bi-national exercises that are benchmarked against the CJMETL.⁴

The planning and execution of joint and combined training and exercises between Canada and the United States also supports the U.S. Northern Command’s Theater Security Cooperation (TSC) mission:

“U.S. Northern Command promotes continental security by expanding military relations with our partner nations in order to deter, prevent, and defend against threats and aggression aimed at the continent. We will assist our neighbors in enhancing security, form stronger alliances to combat terrorism, and counter the threat of weapons of mass destruction for the collective benefit of our nations.”⁵

<p style="text-align: center;"><u>US-UJTL</u></p> <p><u>SN 1. Conduct Strategic Deployment and Redeployment</u></p> <p>SN 1.1 Determine Transportation Infrastructure and Resources SN 1.2 Conduct Deployment and Redeployment</p>	<p style="text-align: center;"><u>CJTL</u></p> <p><u>S 4. Military Strategic Mobility</u></p> <p>S 4.1 Determine the Requirement for Deployment and Recovery Support S 4.2 Initiate Deployment and Recovery</p>
<p style="text-align: center;"><u>US-UJTL</u></p> <p><u>SN 2. Develop Strategic Intelligence, Surveillance, and Reconnaissance</u></p> <p>SN 2.1 Plan and Direct Strategic Intelligence Activities. SN 2.2 Collect Strategic Information SN 2.3 Process and Exploit Collected Strategic Information</p> <p>SN 2.4 Produce Strategic Intelligence SN 2.5 Disseminate and Integrate Strategic Intelligence SN 2.6 Evaluate Intelligence Activities</p>	<p style="text-align: center;"><u>CJTL</u></p> <p><u>S 2. Military Strategic Information and Intelligence</u></p> <p>S 2.1 Plan and Direct Intelligence Activities. S 2.2 Manage and Exploit Information, Communications and Information Systems (CIS) and Procedures.</p> <p>S 2.3 Direct the Production of Strategic Intelligence. S 2.4 Disseminate and Integrate National Intelligence. S 2.5 Evaluate Intelligence Effectiveness.</p>
<p style="text-align: center;"><u>US-UJTL</u></p> <p><u>SN 3. Employ Forces</u></p> <p>SN 3.1 Coordinate Forward Presence of Forces in Theaters SN 3.2 Manage Strategic Firepower SN 3.3 Employ Strategic Firepower SN 3.4 Protect Strategic Forces and Means SN 3.5 Provide Space Capabilities SN 3.6 Conduct Survivable Mobile Command Center Operations and Planning Functions</p>	<p style="text-align: center;"><u>CJTL</u></p> <p><u>S 3. Conduct Military Strategic Operations</u></p> <p>S 3.1 Shape the Theatre of Operations S 3.2 Co-ordinate Provision of Military Operations Across the Spectrum of Conflict</p> <p><u>S 5 Military Strategic Force Protection</u></p> <p>S 5.1 Define the Protection of the Force</p>
<p style="text-align: center;"><u>US-UJTL</u></p> <p><u>SN 4. Provide Sustainment</u></p> <p>SN 4.1 Procure and Distribute Personnel SN 4.2 Provide for Base Support and Services SN 4.3 Provide for Personnel Support SN 4.4 Reconstitute Forces and Means SN 4.5 Set Sustainment Priorities SN 4.6 Acquire Materiel SN 4.7 Acquire, Manage and Distribute Funds</p>	<p style="text-align: center;"><u>CJTL</u></p> <p><u>S 6. Sustain</u></p> <p>S 6.1 Sustain the Force with Materiel and Services S 6.2 Develop Sustainment Base S 6.3 Direct Personnel Support</p>
<p style="text-align: center;"><u>US-UJTL</u></p> <p><u>SN 5 Provide Strategic Direction and Integration</u></p> <p>SN 5.1 Operate and Manage Global Strategic Communications and Information Systems SN 5.2 Assess Worldwide and Regional Strategic Environment SN 5.3 Determine Military Strategic Direction SN 5.4 Provide Strategic Direction to Forces Worldwide SN 5.5 Coordinate Worldwide Information Operations SN 5.6 Provide Public Affairs Worldwide SN 5.7 Manage DoD Resources SN 5.8 Provide Direction and Coordination for historical Documentation of Operations</p>	<p style="text-align: center;"><u>CJTL</u></p> <p><u>S 1 Military Strategic Command</u></p> <p>S 1.1 Provide Military Strategic Direction to the Forces S 1.2 Determine the Objectives to Attack the Adversary</p>
<p style="text-align: center;"><u>US-UJTL</u></p> <p><u>SN 6 Conduct Mobilization</u></p> <p>SN 6.1 Prepare for Mobilization SN 6.2 Alert Forces for Mobilization SN 6.3 Mobilize at Home Station SN 6.4 Move to Mobilization Station SN 6.5 Prepare Units and Individuals at Mobilization Station or CONUS Replacement Center for Deployment SN 6.6 Mobilize CONUS Sustaining Base SN 6.7 Provide Command and Control over Mobilized Forces</p>	<p style="text-align: center;"><u>CJTL</u></p> <p><u>S 7 Military Strategic Force Generation</u></p> <p>S 7.1 Formulate Doctrine, Requirements and Force Development S 7.2 Assemble and Train Elements and Joint Forces S 7.3 Activate Reserve Forces S 7.4 Direct Personnel Requirements S 7.5 Provide Defence Science and Technology Support</p>
<p style="text-align: center;"><u>US-UJTL</u></p> <p><u>SN 8 Foster Bi-National Inter-Agency Relationships</u></p> <p>SN 8.1 Support Other Nations and Groups SN 8.2 Provide Government-wide Support SN 8.3 Coordinate Military Activities within the Interagency Process</p>	<p style="text-align: center;"><u>CJTL</u></p> <p><u>S 8 Corporate Strategy and Policy</u></p> <p>S 8.1 Identify Strategic Priorities, Provide Policy and Planning Guidance S 8.2 Foster Alliance and Regional Relations and Security Arrangements S 8.3 Assist in the Development of Policies for National and International Security S 8.4 Support Government-Wide Programs or Initiatives</p>

FIGURE E-2: UJTL VERSUS CJTL

In support of this Theater security cooperation (TSC) mission, joint and combined training on CANUS plans through a systemic and routine program directly (or indirectly) helps accomplish the following U.S. Northern Command TSC goals:⁶

- Assists our neighbors in enhancing security by reducing vulnerabilities to strategic and conventional attack, terrorist acts, and other asymmetric threats.
- Coordinates in building integrated capabilities to respond to and mitigate the effects of disasters and emergencies in the region, to include humanitarian assistance and disaster relief planning and operations.
- Enhances our mutual ability to prevent (or respond to) the proliferation of weapons of mass destruction.
- Encourages observation or participation in combined or coordinated plans and operations to better protect our homelands.
- Assists in developing appropriate military capabilities to combat transnational crime threats (trafficking of drugs, weapons, contraband, and humans) that have connections to terrorism.
- Achieves domain awareness through appropriate cooperative sharing of threats, the capabilities to counter them, and coordinated action to defeat them.

The Standing Senate Committee on National Security and Defence (SCONSAD) report on the Great Lakes and Saint Lawrence Seaway System (GLSSS)⁷ complements the U.S. Northern Command TSC goals by outlining a number of maritime challenges that U.S. Northern Command, Canada Command and its newly-created JTF-Atlantic, JTF-Pacific and JTF-East (Quebec) will need to focus training upon. This bi-national waterway necessitates a combined approach to surveillance, security and defense.

First, the governments of Canada and the United States must provide the national strategic direction on this area. Then, Canada Command and U.S. Northern Command, together with their major subordinate commands (including all JTFs), will need to work with their civilian partners—Public Safety and Emergency Preparedness Canada (PSEPC), the U.S. Department of Homeland Security (DHS), including the United States Coast Guard (USCG) and the Canadian Coast Guard (CCG)—in the development of the CJMETL. The Permanent Joint Board on Defense (PJBD), in its role as a bi-national homeland defence policy body, should consider chairing a working group on this subject area, looking for long-term sustainable answers to the problems. In the interim, Canada Command and U.S. Northern Command, together with their major subordinate commands (including all JTFs), need to work with their civilian partners—PSEPC, DHS, USCG and CCG—in the development of mission essential tasks to deal with the immediate real-world challenges on the land, in the GLSSS and adjacent waterways on each coast.⁸

CF personnel have been observers of a number of major U.S. Northern Command exercises in recent years. Mechanisms such as the use of a larger CF liaison staff within U.S. Northern Command have been advocated, and the BPG hopes that Canada Command and U.S. Northern Command will deploy liaison or exchange personnel to each other's headquarters. These staffs must be robust in terms of numbers, capabilities and expectations. The staffs should be

complimentary to the exchange officer positions that should be integrated within the staff positions at either HQ.⁹ This offers the greatest benefits in terms of cross-education, bi-national understanding and efficient bi-national operations. The inclusion of PSEPC and DHS exchange officers into this organizational matrix would generate much additional capability and increased situational awareness of national consequence management actions (this is discussed in greater detail in Chapter 7).

Previously, we recommended that there be a greater emphasis on joint specialty officer (JSO) professional development and training. JSOs are educated and experienced in the employment, deployment and support of unified and combined forces to achieve national security objectives. Within the U.S. system, to qualify as a JSO, an officer must complete a full joint duty assignment (JDA) and an approved program of joint professional military education (JPME) such as the Joint Forces Staff College (JFSC). Within JFSC, the Joint and Combined Warfighting School (JCWS) mission is "to educate military officers and other national security leaders in joint, multinational, and interagency operational-level planning and warfighting, to instill a primary commitment to joint, multinational, and interagency teamwork, attitudes, and perspectives."¹⁰ The JCWS curriculum consists of five courses over ten weeks:

- Strategy. Analyzes the combatant commander's role in implementing the military element of national power in pursuit of strategic objectives.
- Operational Capabilities and Functions. Study of operational art across the range of military operations, and through the study of battlefield support systems lessons learned in Operation IRAQI FREEDOM (OIF), students will learn how to incorporate all of the functions together into a synchronized manner in order to develop a joint plan.
- Contemporary Operating Environment. Designed to give joint operational planners insight into the current environment and unique aspects of the total battlespace.
- Joint Planning Process. Ensures the students achieve the complexity of thought required to develop an operational COA that supports attainment of strategic goals and incorporates multinational and interagency coordination, as per adaptive planning process, and requires students to develop a deliberate plan and conduct crisis action planning.¹¹
- Wargaming and Exercise. The exercise scenarios wherein the military element of national power must be used in a supported and then a supporting role to challenge the students.

Canadians are permitted to attend the JFSC JCWS, and in the past twelve years a total of 34 CF officers have attended (see Figure E-3). However, none of these CF graduates are currently serving with either NORAD or U.S. Northern Command. Hence, the personnel system that inserted the CF officers into the U.S. joint training does not currently utilize these graduates for the advancement of binational homeland defense and security. Systemically, a similar observation can be made about U.S. officers attending the Canadian Forces Command and Staff

College (or the shorter CF Joint Course), as well as those who have fellowships in Canada and are subsequently sent to assignments that do not make full use of the CANUS fellowship experience.

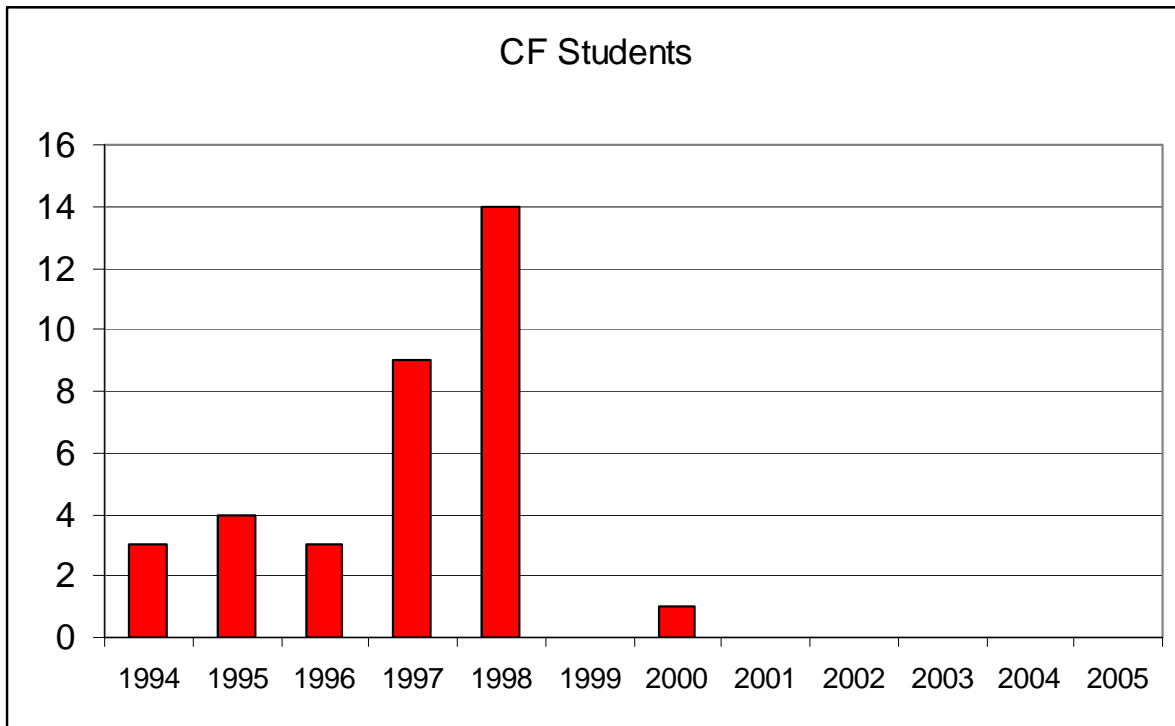


FIGURE E-3: CANADIAN ATTENDANCE AT JFSC-JCWS

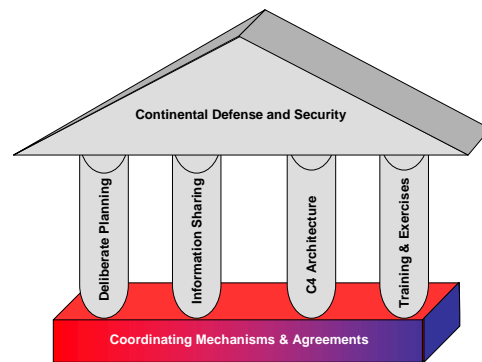
Like their U.S. counterparts, selected CF officers such as those filling NORAD or U.S. Northern Command J5 positions, should be scheduled to attend JCWS en route to an assignment in Colorado Springs, Colorado.¹² This would result in a greater commonality of language, practices and procedures by CF and U.S. planners and operators in NORAD and U.S. Northern Command.¹³ Similarly, U.S. officers that are projected to serve with Canada Command should attend the Canadian joint school. Personnel offices would then need to “credit” personnel records of CF and US students that attend each another’s schools.

Appendix E Notes:

- ¹ This feedback loop within the SPP model supports the Quadrennial Defense Review Report dated 6 Feb 2006, which identified that DOD, “must also adopt a model of continuous change and reassessment if it is to defeat highly adaptive adversaries” (QDR, page 1). And it supports the QDR focus on Joint Training: “It is clear that further advances in joint training and education are urgently needed to prepare for complex, multinational and interagency operations in the future. Toward this end, the Department will: Develop a Joint Training Strategy to address new mission areas, gaps and continuous training transformation” (QDR, page 77). Furthermore, it supports the Canadian International Policy Statement: Defence aim, which states, “the Canadian Forces will enhance their role in defending the North American continent by ... improving their ability to operate alongside American forces, including through more frequent combined training and exercises” (IPS-Defence, page 23).
- ² BPG believes that development of a combined CJMETL would promoted advances in joint training and education which are urgently needed to prepare for complex, multinational and interagency operations in the future. Toward this end, a Joint and Combined Training Strategy to address new mission areas, gaps and continuous training transformation is conceptually supported by U.S. Quadrennial Defense Review Report dated 6 Feb 2006, page 77 and *CF Strategic Evaluation and Validation Guidance*, 13 May 2004.
- ³ Strategic Collective Training Guidance 2004 (SCTG), dated 25 June 2003, page 4/7, para. 10b.
- ⁴ Supports the aim of Canada’s International Policy Statement: Defence that states, “the Canadian Forces will enhance their role in defending the North American continent by “improving their ability to operate alongside American forces, including through more frequent combined training and exercises” (IPS-Defence, page 23). Also supports the intent of the Quadrennial Defense Review Report dated 6 Feb 2006, which identifies a need to “enable partners (such as Canada) through theater security cooperation, and conduct presence missions. These activities include day-to-day presence missions, military-to-military exchanges, combined exercises, security cooperation activities and normal increases in readiness during the seasonal exercises of potential adversaries” (QDR, page 38).
- ⁵ U. S. Northern Command, FY05 Theater Security Cooperation Strategy, dated 1 Oct 2004, page 3.
- ⁶ U. S. Northern Command, FY05 Theater Security Cooperation Strategy, dated 1 Oct 2004, supports the intent of the Quadrennial Defense Review Report dated 6 Feb 2006, which also identifies a need for “security cooperation and engagement activities including joint training exercises, senior staff talks, and officer and foreign internal defense training to increase understanding, strengthen allies and partners, and accurately communicate U.S. objectives and intent. This will require both new authorities and 21st century mechanisms for the interagency process” [and] “Joint command and control capabilities that are survivable in the face of WMD-, electronic-, or cyber-attacks” (QDR, page 31-32).
- ⁷ Standing Senate Committee on National Security and Defence, *Canada’s Coastlines: The Longest Undefended Borders in the World*, page 35, October 2003.
- ⁸ This also supports Canada’s International Policy Statement: Defence “with respect to national assets, the Canadian Forces will enhance their relationships with civil authorities. This will include sharing information as well as developing and exercising plans, so that, in the event of a crisis, the Forces can make a timely, effective contribution to the Government’s overriding objective to protect Canadians” (IPS-Defence, page 18). Also, the U.S. QDR recommends several actions to improve unity of effort with other Federal agencies, state and local governments to improve homeland defense and homeland security to include: (1) “Expand training programs to accommodate planners from other agencies and, working with the Department of Homeland Security and other interagency partners, offer assistance to develop new courses on developing and implementing strategic-level plans for disaster assistance, consequence management and catastrophic events. (2) Partner with the Department of Homeland Security to design and facilitate full-scope interagency homeland defense and civil support exercises, leveraging the Defense Department’s experience in planning and training. The exercises will be conducted in near-real-world conditions, with civilian and military participation from national, state and local government agencies. These exercises should help to yield common understandings of assigned roles and responsibilities, and shared practice in complex planning and operations. (3) At the request of the Department of Homeland Security, organize and sponsor homeland defense tabletop exercises, in which senior leaders from civilian and military agencies practice responses to disaster scenarios. (4) Continue consultations with our neighbors to address security and defense issues of common concern, while ensuring coordination with the Department of Homeland Security” (Quadrennial Defense Review Report dated 6 Feb 2006, page 87).
- ⁹ Exchanges between Canada Command and U.S. northern Command would complement the QDR recommendation on Foreign Area Officers which would “provide Combatant Commanders with political-military analysis, critical

language skills and cultural adeptness. Increase the number ... seconded to foreign military services, in part by expanding their Foreign Area Officer programs. This action will foster professional relationships with foreign militaries, develop in-depth regional expertise, and increase unity of effort among the United States, its allies and partners” (QDR, page 78).

- ¹⁰ Joint Forces Staff College (JFSC) and the Joint and Combined Warfighting School vision, mission and objectives are at: http://www.jfsc.ndu.edu/schools_programs/jcws/course_materials/curriculum.asp.
- ¹¹ The Joint Forces Staff College (JFSC), the Joint and Combined Warfighting School (JCWS) does not focus heavily upon “combined operations”. Separate classes could be established that use the Strategic Planning Process articulated in this report for unique CANUS joint and combined training.
- ¹² Attendance by CF officers is normally handled through Foreign Military Sales (FMS) channels. The Directorate of Training and Education Policy (DTEP) is responsible for FMS International Military Student (IMS) training and nominates students for attendance.
- ¹³ Supports U.S. Quadrennial Defense Review Report dated 6 Feb 2006, which identified that “this operational Total Force must remain prepared for complex operations at home or abroad, including working with other U.S. agencies, allies, partners and non-governmental organizations. Routine integration with foreign and domestic counterparts requires new forms of advanced joint training and education” (QDR, page 76). It also supports the aim of Canada’s International Policy Statement: Defence transformation aim, which “will require the Canadian Forces to ... continue to invest in people. For transformation to be successful, our military personnel must possess the skills and knowledge to function in complex environments” (IPS-Defence, page 12).



APPENDIX F: BACKGROUND AND DISCUSSION SUPPORTING CHAPTER 6. COORDINATING MECHANISMS, INCLUDING BI-NATIONAL AGREEMENTS

Coordinating mechanisms can take many forms, including agreements and Memoranda of Understanding (MOU), the use of exchange and liaison officers, staffing, integrated C4ISR architecture, information sharing, training and exercises, and plan development. These mechanisms could be: military-to-military; military-to-civil agency; federal-to-federal; or federal-to-regional; a bi-national relationship, such as with NORAD; or bi-lateral agreements for cooperation, such as agreements between U.S. Northern Command and Canada Command. The extent of the coordinating mechanisms required differs at the strategic, operational, and tactical levels. The BPG concluded that although coordinating mechanisms exist among Canadian and U.S. military entities, most are predominantly informal and personality driven. Both nations must evolve to the point where “authorities, procedures and practices must permit the seamless integration of Federal, state and local capabilities at home and among allies, partners and non-governmental organizations abroad,”¹ consistent with policies, directives, domestic laws and applicable international law.

To accomplish Canada and U.S. defense and security objectives, the key is to continually examine and formalize the optimum combination of coordinating mechanisms to enhance the Canada-United States security and defense relationship.² Canada’s immediate offer of assistance and response to Hurricane Katrina illustrated the need for coordination and cooperation between the two nations to respond to natural and man-made events. In addition, there will be planned events requiring coordination, such as the 2010 Vancouver Olympics, where geography and threat will require the focus of both countries to protect citizens and visitors of both nations. In particular, there are opportunities for NORAD, U.S. Northern Command and Canada Command to work together for the benefit of both nations. For example, there are current opportunities for formalized arrangements for exchange and liaison officers, combined exercises, and cooperation in development of military plans.

1. Past Efforts

Many of the BPG initiatives discussed in this Report serve as coordinating mechanisms. For example, development of CANUS plans, and conducting focus sessions and exercises serve as coordinating mechanisms. In Chapter 6, the focus was on coordinating mechanisms implemented or enhanced by the BPG and not fully discussed elsewhere in this Report. These include:

- a. Developed a proof-of-concept initiative with Canadian Forces presence in the U.S. Northern Command Joint Operations Center (JOC) to improve information flow between U.S. Northern Command and the Canadian National Defence Command Centre.
- b. Advocated for changes to the Chairman of the Joint Chiefs of Staff (CJCS) Volume 6 Emergency Action Procedures to ensure appropriate Canadian officials would automatically be included in certain conferences. This initiative enhanced combined information sharing and warning.
- c. Assisted with expansion of the GRIFFIN classified electronic sharing environment for collaborative planning activities, forming a network bridge between Canadian and U.S. classified information systems.
- d. Developed a Bi-National Document Library, a planning tool accessible by both governments, which improves planning by providing access to over 850 documents impacting Canada-United States military relationships. In developing the library, BPG analysts reviewed hundreds of nation-to-nation, military-to-military, and civil agency agreements and other documents impacting defense relationships. Further, the BPG made specific recommendations to update or enhance several of the most significant of these agreements.
- e. In May 2004, the BPG hosted a Counter Intelligence and Law Enforcement conference, with participants from intelligence, counter intelligence and law enforcement agencies in Canada and the U.S. At the conference, the participants identified key needs for interagency collaboration.
- f. In October 2004, the BPG issued an *Interim Report on CANUS Enhanced Military Cooperation*³ addressing the status of BPG TOR tasks, providing a list of additional areas for BPG study, and it recommended creation of a Continental Defense and Security Agreement.
- g. The BPG conducted an analytical study to assess how and to what degree a bi-national presence in U.S. Northern Command Battle Staff Cells, as well as within Canada's Strategic Joint Staff crisis action process, would enhance coordination, information/intelligence sharing, collaborative mission planning, and execution among NORAD, U.S. Northern Command, and Strategic Joint Staff. The BPG concluded through this analysis that bi-national staffing of select U.S. Northern Command battle staff cells and the development of accompanying bi-national coordination procedures would significantly enhance bi-national coordination among NORAD, U.S. Northern Command, and Strategic Joint Staff.
- h. Promoted appropriate Canadian civil agency representation in U.S. Northern Command Interagency Coordination Directorate and U.S. civil agency representation in Canada Command.

- i. Supported Canadian military personnel in the stand-up of Canada Command, providing expertise and facilitating communications between Canada Command personnel and their counterparts at NORAD and U.S. Northern Command.
- j. When requested, provided subject matter expertise support during the NORAD renewal negotiations and drafting of the NORAD Agreement and TOR. Group members participated in NORAD Tiger Team for the implementation of changes.
- k. With assistance from NORAD-U.S. Northern Command/JA and CF personnel, developed Planning Considerations for Use-of-Force in CANUS Operations (Tab D), which provide planning considerations and outline foundational principles related to the use of force in the context of CANUS combined operations. These planning considerations allow commanders to address use-of-force issues where applicable in order to reflect national approaches.
- l. After observing the Canada and U.S. military support to civil agencies responding to the effects of Hurricane Katrina, prepared and submitted recommendations with respect to cross-border movement of Canadian forces into the United States. Developed recommendations to ensure legal issues related to deployment of foreign forces within the United States were properly addressed. The BPG also led a team to develop specific recommendations with respect to unique issues relating to cross-border movement of military medical professionals.

2. Other Areas for Additional Study (AAS)

In addition to the coordinating mechanisms listed above, as noted in the Preface in the *BPG Interim Report on Canada and the United States (CANUS) Enhanced Military Cooperation* (13 October 2004), the BPG identified Areas for Additional Study (AAS), issues and questions for further study. Many of these related to cross border coordination issues, including bi-national agreements. As noted above, after analysis, the BPG made specific recommendations on three of the cross-border issues. Other AASs are discussed below.

- a. **Possible update of the *Principles and Procedures for Temporary Cross-Border Movement of Land Forces, dated 13 March 1968*.** The BPG analyzed the Agreement and found it to be restrictive and outdated. Modifications are required to correct deficiencies. As stated in Chapter 6, recommendation 1, the analysis of the Agreement in Tab A should be presented to appropriate military and diplomatic authorities, with advocacy for modification of the Agreement.. Such negotiations should be conducted as soon as possible.
- b. **Possible use of Weapons of Mass Destruction Civil Support Teams (WMD-CSTs) outside the United States, particularly in Canada.** The BPG found WMD-CSTs are an invaluable resource for chemical, biological, radiological, and nuclear incidents. However, CSTs are currently limited geographically by federal statute to U.S. domestic operations. It appears that an expanded role would enhance flexibility in a regional response and/or WMD-CSTs should be fully incorporated into the global force package

as a deployable capability. As explained in Chapter 6, recommendation 3 and at Tab B, military commanders and political leadership should support the QDR initiative for an expanded role for WMD-CSTs to permit them to be used in Canada, particularly with respect to border events.

- c. **Possible cross-border movement of military medical professionals between the United States and Canada, including movement for treatment of civilians.** Military medical professionals can provide unique services in the event of a military response to a hostile attack or as part of military support to civil authorities. There are complex issues relating to out-of-country medical professionals providing medical services, including issues relating to licensing, credentialing, and liability. However, as stated in Chapter 6, recommendation 5, these issues need to be and can be addressed. In particular, the bi-lateral Civil Assistance Plan is a vehicle to address military-to-military aspects of this issue.

3. Other Cross Border Coordination Issues

The BPG did an analysis of five other cross-border coordination issues, and recommends no further action at this time. An explanation of the issues and a summary follows:

- a. **Possible expansion of the Emergency Management Assistance Compact (EMAC) organization to include Canadian provinces/territories.** The BPG considered whether the U.S. Emergency Management Assistance Compact organization should be expanded to include Canadian provinces and territories. The BPG believes that the 1986 *Agreement on Cooperation in Civil Emergency Planning and Management* provides adequate authority for bi-national and bilateral authority for regional (states and provinces/territories) civil emergency planning.
- b. **Possible advocacy of policy changes to enhance role of military chaplains in bi-national civil support missions.** The BPG participated in a military Chaplain Doctrine Conference and informal forums to discuss the issue of a possible policy change to enhance the role of military chaplains in bi-national civil support issues. This issue primarily affects U.S. Chaplains, and the issue will be addressed by the appropriate parties through development of an Appendix to an Annex in the Civil Support Plan and the ongoing religious support doctrine development process.
- c. **Possible amendment of *Rush-Bagot Agreement (1817)* to permit maintenance of armed “naval forces” on the Great Lakes.** To reduce tensions after the War of 1812 and to begin a spirit of cross-border cooperation, Great Britain and the United States entered into the Rush-Bagot Agreement of 1817, which provided for practical disarmament of the Great Lakes by limiting armed naval forces on the Great Lakes. In 2003, Canada and the United States confirmed that the Rush-Bagot Agreement did not apply to U.S. Coast Guard vessels and Canadian law enforcement vessels armed with light armaments to protect ports, the flow of commerce, and the marine transportation system for terrorism. Further, through diplomatic channels, Canada and the United States are addressing related issues tied to cross-border weapons carriage and the escort of vessels through the Great Lakes Waterways

systems. Currently, there are no specific stated requirements for a homeland defense mission in the Lakes conducted by armed naval forces. There is reluctance to amend the Agreement without a specific requirement, which does not currently exist. Further, in the past, the parties have shown an ability to work through specific issues and make appropriate arrangements. Finally, the priority is to work related weapons carriage and escort issues. Therefore, the BPG does not recommend an amendment to the Rush-Bagot Agreement at this time.



FIGURE F-1: EMERGENCY MANAGEMENT ASSISTANCE

- d. **Possible expansion of the *Pacific Northwest Emergency Management Arrangement* and the *International Emergency Management Assistance Memorandum of Understanding* to encompass the entire CANUS border.** The 1986 *Agreement on Cooperation in Comprehensive Civil Emergency Planning and Management* provides authority for bi-national and bilateral authority for regional (state and province/territory) civil emergency planning and management. Two formal compacts have been established pursuant to the Agreement, the *Pacific Northwest Arrangement* and the *International Emergency Management Assistance Memorandum of Understanding*, which cover the west and east coasts of Canada and the United States (as in Figure F-1). Although informal arrangements exist, there are no similar formal arrangements for the interior border. Authority exists for establishment of a formal interior border emergency management assistance arrangement, if the affected states and provinces/territories wish to do so. However, a requirement has not been established, as a multitude of more informal arrangements currently exist and, for now, appear to suffice. As noted in Chapter 6, Recommendation 9, the BPG believes that the

the Consultative Group on Comprehensive Civil Emergency Planning and Management should be reinvigorated, as mandated by the 1986 (and 1998 extension) *Canada-U.S. Agreement on Cooperation in Comprehensive Civil Emergency Planning and Management*; and that the state and province/territory civil relationships should be monitored and supported as appropriate in light of the changes in the Post 9-11 environment.

- e. **Possible assignment of Defense Coordination Officers (DCO)/Emergency Preparedness Liaison Officers (EPLO) to U.S. Northern Command.** In its analysis of the possible assignment of DCOs and EPLOs to U.S. Northern Command, the BPG found that U.S. Northern Command, in coordination with the Office of the Secretary of Defense, was moving forward in integrating EPLOs, and DCOs with U.S. Northern Command under a program to be administered and controlled at U.S. Northern Command. Therefore, the BPG recommends no further action at this time.

TAB A: TEMPORARY CROSS-BORDER MOVEMENT OF CANADIAN AND U.S. LAND FORCES

PURPOSE. Provide an analysis of the *Principles and Procedures for Temporary Cross-Border Movement of Land Forces*, dated 13 March 1968 (Agreement).

SUMMARY. The *Principles and Procedures for Temporary Cross-Border Movement of Land Forces* (1968) are restrictive and outdated, and the Agreement should be modified to correct deficiencies. Proposed elements of a revised Agreement are described in Appendix 1 to this Tab.

RECOMMENDATION. Present an analysis of the Agreement to appropriate military and diplomatic authorities and advocate for modification of the Agreement, encompassing the elements described in Annex 1 to this Tab. Further, advocate for conducting negotiations contemporaneously with future NORAD renewal negotiations.

DISCUSSION:

On 13 March 1968, Canada and the United States entered into an Agreement establishing principles and procedures for temporary cross-border movement of land forces between Canada and the United States. On the same date, the parties also entered into a Confidential Amendment to the Agreement to further define a term in the Agreement.

The Agreement is implemented by Canadian Forces Administrative Order 20-45, Temporary Cross-Border Movement of Land Forces between Canada and the United States, and by U.S. Army Regulation 525-16, Temporary Cross-Border Movement of Land Forces between the United States and Canada.

The Agreement states that land forces of either country engaged in matters of concern to mutual defense should be able to move temporarily into or through the territory of the other country with a minimum of formality and delay. It then establishes procedures for: 1) formal clearances for ceremonial visits, defense installation construction matters and certain large scale exercises; 2) informal clearances for small exercises, troops in transit, administration and logistic support personnel, courtesy visits, movement of individuals, and movement of small groups for test purposes; and 3) clearances for operational movements in a military emergency, Military Assistance to Civil Authorities (MACA)⁴ resulting from enemy attack, MACA other than resulting from enemy attack, and combined exercises designed to rehearse the Basic Security Plan.

In 2004 and 2005, the BPG conducted Table Top Exercises (TTXs), to develop procedures for providing bi-national military assistance to civil authorities engaged in consequence management operations. One such exercise used an earthquake scenario on the west coast of Canada and the United States. During and after the TTX, the participants evaluated the request and approval process for temporary cross border movement of Canadian and U.S. military land forces and noted several deficiencies. In addition, since the TTX, through ongoing discussions among Canadian and U.S. military and diplomatic personnel, other Agreement deficiencies have been noted:

- The document is restrictive and outdated, with detailed provisions better suited for plans and regulations.
- Full implementation of the Agreement requires referencing two classified documents for a full definition of a term in the Agreement.
- The Agreement does not appropriately address operational movements related to defending against or responding to all threats, symmetric and asymmetric.
- The document is limited to the cross-border movement of land forces, and there should be discussion about cross-border movement in other domains. For example, air cross-border movement outside of NORAD is governed by an agreement executed in 1951, and that agreement has many of the same deficiencies as the land Agreement.
- In May 2004, D Law International in the Canadian Strategic Joint Staff (formerly NDHQ) advised that it interpreted the Agreement to restrict cross-border movement for MACA operations to situations when a “state of alert” has been declared or when support is required following an enemy attack. Under this view, cross-border movement of land forces for MACA outside the two situations described above is not permitted. Annex 2 to this Tab provides details on this issue.
- The Agreement was entered into prior to the establishment of U.S. Northern Command, which, on 30 April 2004, assumed Theater Clearance Approval Authority for all official U.S. Department of Defense travel in its area of responsibility, including Canada. Further, the stand-up of Canada Command may have some effect.

The BPG discussed the timing for presenting proposed changes to the Agreement with senior leadership in NORAD and U.S. Northern Command. It was determined that the proposed changes to the Agreement should be submitted to the authorities conducting ongoing negotiations for the renewal of NORAD, because the issues are related and that forum would include the appropriate negotiating authorities. If not negotiated at the same time as negotiations for the new *NORAD Agreement*, then this issue will need to be pursued separately.

ANNEX 1 TO TAB A: PROPOSED AGREEMENT ELEMENTS FOR THE TEMPORARY CROSS-BORDER MOVEMENT OF CANADIAN AND U.S. LAND FORCES

The following pre-decisional draft agreement elements should be considered:

- Intent is that land forces can move temporarily into or through the other's territory with minimum of formality and delay.
- Must determine when clearance required through diplomatic and military channels (formal clearance?) or just military (informal?). Is it important to maintain practice of distinguishing among formal, informal and military operations movements?
 - Ceremonial
 - Individuals, small groups
 - New military programs, surveys
 - Training, exercises, tests and trials (small and large)
 - Plan Rehearsal
 - Should be all CANUS plans, bi-national and bi-lateral – not just BSD (current Agreement refers to BSD only)
 - Military Operations
 - Both for defense and security
 - Including military-to-military civil support
 - Military operations should cover response to all threats, symmetric and asymmetric
 - Specifically exclude NORAD movements
- Include other domains (i.e. maritime and air) outside NORAD
 - There is a similar agreement for air, which requires updating.
 - Some maritime movement, such as in Great Lakes, being addressed by other means.
- Coordination with Immigration and Customs
- Periodic review of procedures. Should procedures for Canada and U.S. match?
- How detailed should procedures be
 - Time limits for notice or request – in Agreement or Regulations?
- Applicability of *Agreement to Facilitate Cooperation between Military Services of the Two Countries* (Chapeau) (1994)?
- Country clearance by military
 - U.S. Northern Command
 - Canada Command
- Equipment and material remain property of country.

ANNEX 2: D LAW INTERNATIONAL OPINION - MACA RESTRICTIONS RELATED TO THE TEMPORARY CROSS-BORDER MOVEMENT OF CANADIAN AND U.S. LAND FORCES

On 13 March 1968, Canada and the United States entered into an agreement establishing principles and procedures for temporary cross-border movement of land forces between Canada and the United States. On the same date, the parties also entered into a confidential amendment to further define terms in the Agreement.

The Agreement is implemented by Canadian Forces Administrative Order 20-45, *Temporary Cross-Border Movement of Land Forces between Canada and the United States* (CFAO 20-45), and by U.S. Army Regulation 525-16, *Temporary Cross-Border Movement of Land Forces between the United States and Canada* (AR 525-16).

In May 2004, D Law International in Canada's Strategic Joint Staff (SJS-formerly NDHQ) advised that it interpreted the Agreement to restrict cross-border movement for military assistance to civil authorities (MACA) to situations when a "state of alert" has been declared or when support is required following an enemy attack. Under this view, cross-border movement of land forces for MACA outside the two situations described above is not permitted.

The annex to the Agreement, which outlines procedures for the movement of land forces with their material of one country into or through the territory of the other country, provides for operational movement for civil support in two instances:

1. Military support of civil emergencies resulting from enemy attack; and
2. Military support of civil authorities in disasters other than those resulting from enemy attack.

In both instances, the annex provides that movement for civil support should require informal clearance through military channels only; following a decision by the receiving Government that military support of civil authorities is required.

It is intended that the Annex implement Agreement principles. The principles in the opening text of the Agreement specifically mention six situations of contemplated cross-border movements, including military support of civil emergencies resulting from enemy attack. Also, Paragraph 2 of the Agreement states that the "principles supersede any previous agreement of a general character regarding the movement across the Canada-United States border of land forces engaged in matters of concern to mutual defense." The Agreement Annex addresses thirteen cross-border situations, including seven situations not specifically mentioned in the opening text of the Agreement, including MACA in disasters other than those resulting from enemy attack. D Law International asserted that because the Annex is more permissive than the Agreement text, there is an apparent contradiction between the Agreement and Annex. Therefore, in their opinion, this contradiction must be resolved by using the restrictive approach of referring only to the opening text of the Agreement, rather than to the Annex. Under this view, situations described in the Annex, but not mentioned in the opening text of the Agreement, are not

permitted. Since movement for MACA in disasters other than those resulting from an enemy attack is not mentioned in the opening Agreement text, it is not permitted under the Agreement.

This is a very restrictive reading of the Agreement. Other situations described in the Agreement Annex, but not specifically mentioned in the opening text, include large scale exercises; troops in transit for exercises; support personnel required for visiting forces; courtesy visits; movements of individuals; and movement for test purposes of small groups of personnel and material. If D Law International's interpretation is adopted, it appears all of those movements would also be precluded under the Agreement. It is important to note, however, that both CFAO 20-45 and AR 525-16 include procedures for movements for all thirteen instances mentioned in the Annex, including military support of civil authorities in disasters other than those resulting from enemy attack, and both countries are operating under procedures permitting movements for all thirteen instances. It should be emphasized that D Law International has not issued a formal opinion on this issue, and to date, there has been no attempt to formally override these current policies and procedures. However, Agreement modification would provide an opportunity to formally resolve this issue.

TAB B: USE OF WEAPONS OF MASS DESTRUCTION-CIVIL SUPPORT TEAMS OUTSIDE THE UNITED STATES, PARTICULARLY IN CANADA

PURPOSE. Provide a summary of the mission of Weapons of Mass Destruction Civil Support Teams (WMD-CSTs) and address issue of whether WMD-CSTs may participate in operations outside the United States (particularly in Canada).

SUMMARY. WMD-CSTs are an invaluable resource for Chemical, Biological, Radiological, and Nuclear (CBRN) incidents. However, CSTs are currently limited geographically by federal statute to U.S. domestic operations. Some support exists within the National Guard Bureau and within some states to change federal law to permit the teams to operate outside the United States, particularly within Canada to address border incidents.

RECOMMENDATION. Military commanders and political leadership should consider an expanded role for WMD-CSTs. If it is determined that an expanded role would enhance flexibility in a regional response or that WMD-CSTs should be fully incorporated into the global force package as a deployable capability; the BPG recommends a change in federal law to permit WMD-CSTs to operate in Canada.

DISCUSSION:

The *Enhanced Military Cooperation Agreement* (2002) reaffirms that Canada and the United States remain “convinced that enhanced cooperation ... conducted within the framework of the North Atlantic Treaty, remains vital to their mutual security, compatible with their national interests, and an important element of their contribution to the overall security of the NATO area.” The Agreement also specifically refers to the threat from the “potential for the use of weapons of mass destruction delivered by unconventional means, by terrorists or others.” The BPG is directed to develop “detailed contingency plans and consultation and decision-making arrangements, describing the processes to be followed in the event that attacks, threats, incidents, or emergency circumstances warrant independent, cooperative or coordinated military or civil/military response.” In fulfilling its mandate, the BPG has identified an issue relating to geographic limitations on WMD-CSTs.

The mission of WMD-CSTs is to support local and state authorities at domestic Weapons of Mass Destruction/Nuclear Biological Chemical (WMD/NBC) incident sites by identifying agents and substances, assessing current and projected consequences, advising on response measures, and assisting with requests for additional military support. Unlike other U.S. military rapid response units, WMD-CSTs have a unique state and local focus. Most WMD-CSTs currently consist of 22 full-time National Guard members, who are federally resourced, trained and exercised, and employ federally approved CBRN response doctrine. However, they perform their mission primarily under the command and control of the governors of the states in which they are located. Teams are equipped with a mobile laboratory capable of providing identification of chemical or biological materials, and with a communications suite capable of linking the incident site with other local, state, federal agencies and military headquarters. The original plan for WMD-CSTs provided for only ten teams, one in each Federal Emergency Management Agency (FEMA) Region. However, as the number of certified teams has increased,

the concerns about availability of local resources for consequence management in domestic operations have been alleviated. E.g. On November 22, 2004, the Department of Defense announced that it had notified Congress of the fielding plan for 11 new WMD-CSTs funded in the Defense Appropriations Act for fiscal year 05. The fielding and certification of these final 11 teams will bring the total number of WMD-CSTs to 55. (See Figure F-2).

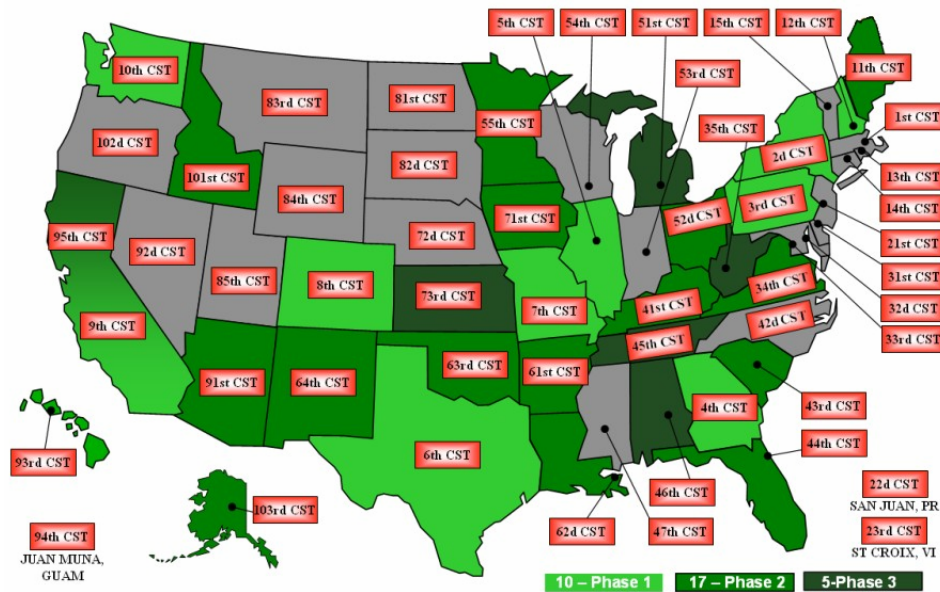


FIGURE F-2: WMD-CST LOCATIONS

10 U.S.C. 12310 limits performance of WMD-CST duties to the “geographical limits of the United States, its territories and possessions, the District of Columbia, and the Commonwealth of Puerto Rico.” This provision, which also applies to teams in federalized Title 10 U.S.C. status, was to ensure local consequence management resources would be available for domestic operations, if required. A change in this federal law is required to federalize and allow teams to operate in Canada.

A change in the federal law would facilitate cross-border consequence management response as provided for in the Civil Assistance Plan under development between U.S. Northern Command and Canada Command. In addition, an expanded role would enhance flexibility in a regional response or WMD-CSTs could be fully incorporated into the global force package as a deployable capability. For example, in the event of a WMD incident in Canada near the border, there would most likely be beneficial to the United States for the teams to assist Canadian authorities in Canada to limit harmful effects on the United States.

Discussions with service members in the National Guard Bureau have indicated support within the Bureau and from at least some of the state Adjutant Generals to modify the law to permit WMD-CSTs in Canada, particularly in a border incident. From the National Guard perspective, the current relationship between Canada and United States is a reciprocal one to stem the flow of terrorists and transnational threats across the border. It is a relationship of “neighbors helping neighbors,” similar to the relationship among U.S. governors.

TAB C: CROSS-BORDER MOVEMENT OF MILITARY MEDICAL PROFESSIONALS

PURPOSE. Discuss issues related to possible cross-border movement of military medical professionals between the United States and Canada, including movement for treatment of civilians.

SUMMARY. Military medical professionals can provide unique services in the event of a military response to a hostile attack or as part of military support to civil authorities. There are complex issues relating to out-of-country medical professionals providing medical services, including licensing, credentialing and liability issues, pertaining to medical professionals providing services out-of-country. However, as seen during the response to Hurricane Katrina, these issues can be addressed. In particular, the bi-lateral Civil Assistance Plan may provide a vehicle to address military-to-military aspects of this issue.

RECOMMENDATION. U.S. Northern Command and Canada Command, with appropriate civil agencies, work together to develop checklists, propose language for nation-to-nation agreements, Civil Assistance Plan annexes, and related products to facilitate movement of military medical professionals across the border when required.

DISCUSSION:

In certain catastrophic circumstances, Canadian and U.S. military medical professionals may be called upon to cross the border to provide medical assistance. For example, in the aftermath of Hurricane Katrina, Canadian military medical professionals crossed the border into the U.S. Although their services were limited to medical assistance to their own forces, hurricane operations were a catalyst to begin development of processes and procedures for future cross border military medical support. An outline of those processes and procedures follows.

To determine and address issues related to the support, it will be important to first define the medical support requested and/or offered (i.e. is it medical supplies and/or personnel?). If the support includes military medical professionals (personnel), categories of individuals to be treated must be clearly stated. Will the medical professionals provide integral support to their own forces only or will they treat other NATO military forces, non-NATO military forces, or civilians?

After the anticipated scope of support is defined, including categories of individuals to be treated, a U.S. Department of State and Foreign Affairs Canada exchange of notes authorizing medical support can be developed, either separately or as a subset of an overall support agreement. The notes should specify the medical capability (supplies and/or personnel) and categories of individuals to be treated.

If medical support will be limited to military members, military-to-military arrangements can be put in place or, if already in place, can be activated.

If civilians are to be treated, there will be issues relating to out-of-country medical professionals providing assistance. The diplomatic notes should contain language requesting U.S. state governor(s) or an equivalent Canadian government official to issue an appropriate order addressing licensing, credentialing, liability, applicability of “Good Samaritan Law,” or other issues directly related to foreign military medical professionals providing medical services to civilians in the other country.

As an example, in the aftermath of Hurricane Katrina, the Louisiana Governor issued an Executive Order declaring a public health emergency and suspending Louisiana State licensure laws, rules, and regulations for out-of-state and out-of-country medical professionals and personnel offering medical services to those needing services as a result of the disaster. The principal caveat was that the out-of-state or out-of-country medical professionals must possess a current medical license in good standing in their respective state or country of licensure and that they practiced in good faith and within the reasonable scope of their skills, training, or ability. The Executive Order also provided that such medical professionals would be considered agents of the state of Louisiana for tort liability purposes. Although Canadian medical professionals did not provide services under the authority of the order, the governor’s order was intended to pave the way for out-of-state and out-of-country medical professionals to provide medical assistance.

The Bi-Lateral Civil Assistance Plan, which is currently being staffed, provides for a cooperative and well-coordinated response to national requests for military assistance in the event of natural disasters or other major emergencies in Canada or the United States. The CAP should be reviewed regularly to ensure military-to-military processes and procedures are in place to facilitate movement of military medical professions across the border as outlined above.

To further develop the necessary processes and procedures, the U.S. Northern Command and Canada Command, with appropriate civil agencies, should work together to develop checklists, proposed language for nation-to-nation diplomatic notes, Civil Assistance Plan annexes, and related products to facilitate movement of military medical professionals across the border when required.

TAB D: PLANNING CONSIDERATIONS FOR USE OF FORCE IN CANUS OPERATIONS

1. Purpose. This Tab provides foundational principles related to the use of force in the context of Canada-United States joint and combined military operations.

2. Areas to be addressed/covered. In any combined operation, the following areas related to the use of force should be addressed where applicable in order to reflect national approaches: [Assumption: That during the mission planning process, issues related to weapons carriage have been resolved by national leadership, and authorization for carrying weapons has been given by national authorities. It should be noted foreign military personnel carrying weapons is a particularly sensitive issue in civil support missions.]

a. Personal and collective self-defense.

(1) Self-defense is the authority to use appropriate force, up to and including deadly force to protect the following individuals against a hostile act or hostile intent:

- (a) Oneself;
- (b) Other members of the member's national forces;
- (c) Foreign military personnel who are attached or seconded to a member's national Forces; and
- (d) Members of combined, coalition or allied forces.

(2) Under the Canadian system, the use of force is controlled through Rules of Engagement (ROE). However, use of force in personal, unit and force self-defence is separate from ROE when the personnel in question belongs or is attached to the Canadian Forces (CF). Whereas ROE may change during an operation, personal, unit and force self-defence is a constant. Without further written or oral direction, CF personnel are entitled to use force in self-defence to protect oneself, other CF personnel, and foreign military personnel attached to or seconded to the CF against a hostile act or hostile intent. However, where the CF is participating in combined operations, the definition of self-defence will normally be expanded, through ROE authorization, to include all members of a combined force.

(3) Under the U.S. system, unit and collective self-defense is controlled through orders, either Rules for Use of Force (RUF), within the U.S., or through ROE outside the country or to repel a military attack against the U.S.. The U.S. ROE and RUF identify an "inherent right" and "obligation" of self-defense. The Canadian definition of self-defense does not include these conceptual phrases.

(4) Self-Defence during Combined CANUS Operations. When participating in a combined operation, the definition of self-defence should be expanded, through RUF/ROE authorization, to include all members of both nations' forces.

b. Variations in national laws and policies. CF and U.S. military forces will adhere to their own national laws and policies. They are not obliged to execute tasks or operations that would constitute a breach of these national laws or policies.

c. Deadly/non-deadly force. RUF/ROE must explicitly mention the level of force authorized in given situations, such as the defense of individuals not-belonging to the combined forces, and defense of property. Non-deadly force is defined as that force which is not intended to cause death or serious injury. Deadly force is defined as that force which is intended to cause death or serious injury regardless of whether death or serious injury actually results. This is the ultimate degree of force.

d. Defense of others. RUF/ROE must explicitly mention what force may be used in the protection of persons others than those covered by self-defense and clearly specify who these individuals are. In Canada, when the CF conducts domestic operations, and if its members have been accorded “peace officer” status pursuant to the Criminal Code, the authority to use force in defence of others is specifically extended to all persons.

e. Defense of property. RUF/ROE must explicitly mention what force may be used in the protection of property and, when applicable, designate property with special status such as mission essential equipment or force property, the protection of which would justify the use of deadly force. Under the Canadian system, the level of force authorized to defend property will be based on the mandate of the mission, and will be issued by the CDS. Should the use of force be authorized to defend property, it will normally not be all-inclusive and will generally be restricted to property with designated special status.

f. Use of electromagnetic spectrum. RUF/ROE must explicitly mention what measures using or affecting the electromagnetic spectrum are authorized. Particular attention must be paid to Receiving State laws on the issue.

g. Computer Network Operations (CNO). RUF/ROE must explicitly mention what types of CNO are authorized. Particular attention must be paid to Receiving State laws on the issue.

h. Detention. RUF/ROE must explicitly mention what force may be used to detain individuals and in which circumstances. Moreover, the RUF/ROE must specify what force can be used to prevent escape and to protect the detained persons from hostile act or intent.

i. Surveillance and reconnaissance. RUF/ROE must clearly identify the means, measures and methods authorized to conduct surveillance and reconnaissance activities.

j. Restrictions for weapons systems and ammunition. Use of weapons systems and ammunition must be in accordance with applicable domestic and international law, and national policy. If the CF is participating in a combined operation where weapons prohibited by the laws of armed conflict, may or are intended to be deployed, specific direction will be promulgated by the CDS concerning the relationship of the CF to forces using these weapons. Orders must

specifically authorize the use of the following systems/ammunition and identify any limitations pertaining to their use:

- (1) riot control agents;
- (2) non-lethal weapons;
- (3) expanding/frangible ammunition;
- (4) mines;
- (5) indirect fire systems;
- (6) close air support; and
- (7) other systems or ammunition which may raise legal issues.

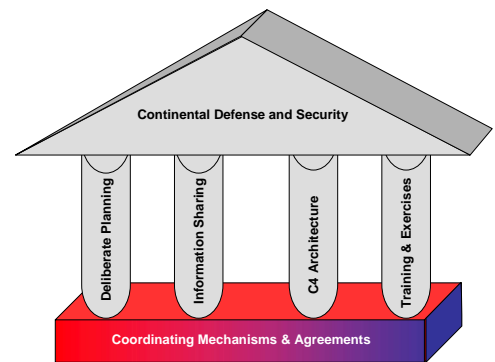
Appendix F Endnotes:

¹ Supported by *Quadrennial Defense Review Report*, dated 6 Feb 2006, page 84.

² Within the *Canada-U.S. Partnership: Enhancing Our Common Security, Workshop Report* from the Institute for Foreign Policy Analysis (IFPA), LTG Inge identified that “The bilateral Canada-U.S. relationship is critical to the national interest of both nations. However, many of our bilateral agreements were written before 2000, and none mention the term “asymmetric threat.” Remarkably, the current Basic Security Document assumes that there will not be a non-state-based threat to our homelands. • There is no debate about the obvious importance of a strong Canada-U.S. bilateral security relationship. The real debate will be about the mechanisms we employ to maintain and improve upon that relationship. NORAD headquarters in Colorado Springs is an example of the partnership and spirit of mutual cooperation that will remain necessary for defending our homelands. Combating asymmetric threats requires the effort of many agencies and their varied capacities working together. The Bi-National Planning Group has put forth some very provocative ideas and has set out what training and analysis is required going forward. However, there is much more work to be done. We will first need to decide what areas are suitable for bilateral cooperation and then devise the mechanism for it. It is easier to devise the mechanism than it is to decide on what mechanisms actually need to be devised.” Obtained from: <http://www.ifpa.org/pdf/Canada-US-Report.pdf>

³ *BPG’s Interim Report on Canada and the United States (CANUS) Enhanced Military Cooperation* (13 October 2004) is available at <https://bpg.noradnorthcom.mil> or civilian users can access it at the HSDEC site, at <http://www.hsdec.org/research.aspx>.

⁴ Due to differences in Canadian and U.S. doctrinal terms, Civil Support (CS) is used and in this report is defined as DND or DOD support to Canadian or U.S. civil authorities for domestic emergencies and other activities as designated by our political leaders. Military Support to Civil Authorities (MSCA) - Activities and measures taken by the military to foster mutual assistance and support between the DOD and any civil government agency in planning or preparedness for, or in the application of resources for response to, the consequences of civil emergencies or attacks, including national security emergencies. Military Assistance to Civil Authorities (MACA) - Those DOD activities and measures covered under MSCA (natural and manmade disasters) plus DOD assistance for civil disturbances, counter-drug, sensitive support, counterterrorism, and law enforcement. Consequence Management (CM) comprises those essential services and activities required to manage and mitigate problems resulting from disasters and catastrophes. Such services and activities may include transportation, communications, public works and engineering, fire fighting, information planning, mass care, resources support, health and medical services, urban search and rescue, hazardous materials, food, and energy. (Taken from DODD 3025.15, Feb 18, 97, *Military Assistance to Civil Authorities*.) The Canadian concept of Aide to Civil Authorities (ACA) is similar to MSCA.



APPENDIX G: CANADA-UNITED STATES DEFENSE RELATIONSHIP AGREEMENTS

In its TOR, the BPG was tasked to:

“Conduct review of ... military assistance protocols with a view toward improving North American land and maritime defense...”

In satisfying this task, the BPG focused on the following documents, which were the most significant to the BPG’s work. As explained elsewhere in the *Final Report*, the BPG has made specific recommendations with respect to some of these agreements to improve Canada-U.S. land and maritime defense.

1. NORTH AMERICAN AEROSPACE DEFENSE COMMAND (NORAD) AGREEMENT (1958)/TERMS OF REFERENCE FOR NORAD (2003).

The North American Aerospace Defense Command (NORAD) Agreement, which was first concluded on 12 May 1958, provides for bi-national cooperation for aerospace defense of North America through participation in NORAD, within the framework of the *North Atlantic Treaty*. The Agreement is reviewed or extended approximately every 5 years (or as required) and the current Agreement was executed on 16 June 2000. In addition, the Agreement was amended in August 2004 with respect to warning for the missile defense mission. The Terms of Reference for NORAD, dated 9 December 2003 supplement the *NORAD Agreement* by clarifying and delineating, where necessary, military responsibilities directed or implied by the Agreement.

2. ENHANCED MILITARY COOPERATION AGREEMENT (2002)/TERMS OF REFERENCE FOR THE BI-NATIONAL PLANNING GROUP (2003).

The Enhanced Military Cooperation Agreement, concluded 5 December 2002, reaffirmed the value of NORAD and provided for broadening bi-national defense arrangements between Canada and the United States. It also established the Bi-National Planning Group. The Agreement was scheduled to expire on 5 December 2004, but it was extended until 12 May 2006. The Terms of Reference for the Bi-National Planning Group (BPG), dated 24 August 2003, contain Canadian Chief of Defence Staff and U.S. Chairman of the Joint Chiefs of Staff direction to the BPG in carrying out military responsibilities directed or implied by the Agreement.

3. MEMORANDUM OF UNDERSTANDING BETWEEN U.S. DOD AND CANADA DND CONCERNING MUTUAL SUPPORT (1999).

The MOU between U.S. Department of Defense and Canada Department of National Defence concerning Mutual Support, concluded 21 October 1999, established the basis for provision of mutual logistic support, supplies and services and establishes equitability in reciprocal arrangements. This MOU currently serves as the U.S. Northern Command Acquisition and Cross-Servicing Agreement.

4. AGREEMENT TO FACILITATE CO-OPERATION BETWEEN MILITARY SERVICES OF TWO COUNTRIES (CHAPEAU) (1994).

The Canada-United States Agreement to Facilitate Cooperation between Military Services of Two Countries, also called the “Chapeau,” was concluded 19 August 1994. It provides that whenever the two national defense organizations undertake to cooperate in writing, they may explicitly invoke this Agreement, which address issues of liability, right to own and use information, lease or loan of material or equipment, and logistics support.

5. GENERAL SECURITY OF INFORMATION AGREEMENT (1962).

The General Security of Information Agreement, concluded 30 January 1962, established principles of safeguarding classified information communicated between the Canadian and U.S. governments. The Agreement invokes the North Atlantic Treaty Organization (NATO) principles and standards.

6. RUSH-BAGOT AGREEMENT (1817).

The Rush-Bagot Agreement was concluded between the U.S. and United Kingdom on 29 April 1817. The Agreement limits armed naval vessels on the Great Lakes. Although the Agreement is outdated and technically obsolete, the Agreement is maintained as a symbol of the cooperation and mutual respect between Canada and the United States. A Pro Memoria of 17 March 2003 consultations confirmed that the Rush-Bagot Agreement does not apply to United States Coast Guard vessels with light arms conducting law enforcement operations in U.S. waters.

7. PRINCIPLES AND PROCEDURES FOR TEMPORARY CROSS-BORDER MOVEMENT OF LAND FORCES (1968).

The Principles and Procedures for Temporary Cross-Border Movement of Land Forces was concluded on 13 March 1968, and modified by a Confidential Agreement of the same date. The Agreement establishes principles and procedures for temporary cross-border movement of land forces between Canada and the United States.

8. OGDENSBURG DECLARATION (1940).

The Ogdensburg Declaration, concluded on 18 August 1940, established the Permanent Joint Board on Defence to consider the defence of the north half of the Western Hemisphere.

9. NORTH ATLANTIC TREATY (1949)/NATO SOFA (1951).

The *North Atlantic Treaty*, concluded on 4 April 1949, is an agreement for collective defense. The *North Atlantic Treaty Organization Status of Forces Agreement* (SOFA), dated 19 June 1951, defines the status of NATO forces while in the territory of another party to the *North Atlantic Treaty*.

10. MEMORANDUM OF UNDERSTANDING AMONG DOD OF AUSTRALIA, DND OF CANADA, NEW ZEALAND DEFENCE FORCE, SECRETARY OF STATE FOR DEFENCE FOR UNITED KINGDOM, AND DOD OF UNITED STATES CONCERNING MULTILATERAL EXCHANGE OF MILITARY INFORMATION (1997).

The *MOU concerning Multilateral Exchange of Military Information*, concluded 15 April 1997, established a mechanism for the multilateral exchange of operational military information among participants to enhance military preparedness, readiness, capability and interoperability.

11. CANADA - UNITED STATES BASIC SECURITY DOCUMENT (MCC 100-35) (1999).

The *Basic Security Document* (BSD), dated 20 August 1999, provides strategic guidance to Canadian and United States' senior military leaders for bi-national defense. In addition, it establishes the overarching framework for Canada-United States military cooperation and provides strategic direction for bi-national military planning. A draft replacement, the Basic Defense Document, is currently in coordination.

12. SECURITY AND PROSPERITY PARTNERSHIP OF NORTH AMERICA (2005).

On 23 March 2005, the President of the U.S., the Prime Minister of Canada, and the President of Mexico announced the establishment of the *Security and Prosperity Partnership of North America* to develop new avenues of trilateral cooperation to make open societies safer and more secure, businesses more competitive, and economies more resilient. This included establishment of a common approach to security to protect North America from external threats and to prevent and respond to threats within North America.

13. AGREEMENT ON COOPERATION IN COMPREHENSIVE CIVIL EMERGENCY PLANNING AND MANAGEMENT.

The *Agreement on Cooperation in Comprehensive Civil Emergency Planning and Management* was concluded on 28 April 1986 and extended 2 December 1998. Although not a defense arrangement, this Agreement is relevant to military support to civil authorities, as the Agreement provides authority for bi-national and bilateral regional civil emergency planning and management. Two formal compacts have been established pursuant to the Agreement, the *Pacific Northwest Arrangement* and the *International Emergency Management Assistance Memorandum of Understanding*, which cover the west and east coasts of Canada and the United States. The Agreement also established a Consultative Group on Comprehensive Civil Emergency Planning and Management.

BI-NATIONAL DOCUMENT LIBRARY

In developing the Bi-National Document Library, the BPG compiled hundreds of agreements and other documents impacting the Canada-United States defense relationship, including the agreements listed below. Although not as significant to the BPG's work as the documents listed above, the list is provided to give readers a sense of the spectrum of agreements compiled by the BPG. It should be noted that some of the agreements may be obsolete or expired, and users are encouraged to use the document library on the NORAD-USNORTHCOM portal page for the current library of documents.

The format of each entry below includes a unique BPG reference number, the document title, parties to the document, and the purpose of the document.

- BPG# 7. MOU between the U.S. Navy and Canadian Forces concerning Aviation Cooperation (1987) It sets forth means for an active relationship by which professional knowledge of aircraft operations, experience, and doctrine are shared to the maximum extent permissible between the two countries within the framework of existing agreements and policies.
- BPG# 8. Agreement between the Department of Defence Production, Canada and the U.S. Departments of the Army, Navy, and Air Force and the Defense Supply Agency concerning Canadian Commercial Corporation (1956) It sets forth policies and provides procedures with respect to all contracts for supplies and services placed with the Canadian Commercial Corporation on or after 01 October 1956.
- BPG# 9. MOU between the U.S. Department of Defense and the Department of National Defence of Canada concerning Mutual Support (1999) It states the desire and means to further the rationalization, interoperability, readiness, and effectiveness of the participant's military forces through increased cooperation and provision of mutual logistic support, supplies and services and reciprocal arrangements.
- BPG# 10. North American Aerospace Defense Command (NORAD) Terms of Reference executed by U.S. Chairman of the Joint Chiefs of Staff and Canadian Chief of Defence Staff (2003) It supplements the 2001 NORAD Agreement by clarifying and delineating, where necessary, military responsibilities directed or implied by the Agreement.
- BPG# 11. Implementing Arrangement between the U.S. Navy and the Canadian Forces concerning the Logistic Support of U.S. Antarctic Program AN/TRN-26 TACAN System (2000) It outlines the provisions for reliable and economical support of AN / TRN-26 TACAN systems as navigational aids and non-precision approach aid for Antarctica.
- BPG# 23. MOU between the U.S. Department of Defense and the Department of National Defence of Canada concerning Principles of Combined Logistic Support (1987) It outlines principles for combined logistics support subject to the national laws and regulations of Canada and the U.S. This support includes jointly developing, producing, or procuring equipment, equipment interoperability, equipment stockpiles, and practical assistance in increasing respective industrial bases.
- BPG# 24. North American Defense Industrial Base (NADIB) Organization Charter (1987) It prescribes the mission to foster cooperation between the Governments of Canada and the U.S. in development, composition and administration of the NADIB organization to ensure Industrial Preparedness Planning remains a visible and vital element of the goal to strengthen the NADIB.
- BPG# 27. Mapping, Charting and Geodesy Agreement between Defense Mapping Agency U.S. Department of Defence and Director of Cartography National Defence Canada (1976) It establishes an understanding concerning cooperation in mapping, charting and geodesy activities in support of mutual defense.

- BPG# 28. MOU between the U.S. Department of Defense and the Canadian Department of National Defence concerning NAVSTAR Global Positioning System (GPS) (1978) It covers terms and conditions for a joint research program concerning NAVSTAR GPS regarding actual development of user requirements and means for exchange of information between project offices.
- BPG# 29. Search and Rescue Agreement between Chief of Defence Staff, Canadian Forces and Commandant, U.S. Coast Guard (1975) It provides for coordinated search and rescue activities in maritime areas of mutual interest in the western area.
- BPG# 30. Search and Rescue Agreement between Air Transport Group Headquarters of the Canadian Armed Forces and the Ninth District of the U.S. Coast Guard (1987) It states the broad policies that will provide coordinated search and rescue activities in the maritime regions of mutual interest.
- BPG# 144. MOU in the Field of Cooperative Development between the U.S. Department of Defense and the Canadian Department of Defence Production (1963) This cooperative program compliments the U.S. – Canadian Defence Production Sharing Program by establishing a cooperative program in defense research and development between the two participants.
- BPG# 163. Bi-National Planning Group (BPG) Terms of Reference (2003) It constitutes the Canadian Chief of the Defence Staff and Chairman of the Joint Chiefs of Staff direction to the head of the BPG clarifying and delineating military responsibilities directed or implied by Canada-U.S. Enhanced Military Cooperation Agreement.
- BPG# 291. MOU between the U.S. Department of the Navy and the Canadian Department of National Defence concerning Supplementary and Administrative Arrangements for the Operation of the Torpedo Test Ranges in the Strait of Georgia and Jervis Inlet (BC) (1994) It sets forth the provisions for the operation and maintenance of the Torpedo Test Ranges in the Strait of Georgia and Jervis Inlet.
- BPG# 292. MOU between the U.S. Department of Defense and the Department of National Defence of Canada concerning U.S. Navy Participation in the Equipping, Staffing and Operation of CF Integrated Undersea Surveillance System (IUSS) Centre (1994) It establishes and implements arrangements for the joint operation and staffing of a Centre in Halifax which utilizes the IUSS to meet both real-time operational requirements as well as serve as a site where oceanographic research experience, professional knowledge and doctrine of both services can be shared.
- BPG# 293. Project Arrangement between U.S. Department of Defense and Department of National Defence of Canada for CANUS Test and Evaluation of the Sonobuoy Mechanical Self-Noise Test Program (1989) It specifies the arrangements for U.S. Navy sonobuoy mechanical self-noise testing in Canada; establishes procedures, terms and a condition mutually agreed upon; and identifies the resources and personnel required from both participants.
- BPG# 343. MOU between U.S. Department of Defense and Department of National Defence of Canada concerning the Exchange of Acoustic Intelligence between Canada and the U.S. It is used to pass the information to U.S. Navy and the U.S. Hydrographic Service in exchange for like information in shared waterways.
- BPG# 347. MOU for Liaison Officer (LO) Exchange between the Department of National Defence of Canada and the U.S. Department of Defense. It sets out the arrangements with respect to the exchange of LO.
- BPG# 348. MOU for Loan of National Imagery and Mapping Agency (NIMA) Analysts to CFJIC between the Department of National Defence of Canada, and the U.S. Department of Defense It is classified and describes a personnel arrangement.
- BPG# 349. MOU for Quadripartite Distributed Production Arrangement among U.S. Department of Defense, Department of National Defence of Canada. It is classified and prescribes the parameter and responsibilities for cooperative production of information by the QDPC participants.

- BPG# 352. Annex D to Measurements and Signatures Intelligence Cooperation Agreement between U.S. Department of Defense and Department of National Defence of Canada. It is classified deals with CANUS sharing of MASINT information.
- BPG# 405. MOU between the U.S. Department of Defense and the Department of National Defence of Canada for Information Assurance (IA) / Computer Network Defense (CND) (2001) It allows the participants to conduct bilateral IA/CND and information sharing to contribute to the participants' common goal of protecting their information networks.
- BPG# 406. MOU between the Department of National Defence of Canada and the U.S. Department of Defense of the concerning Exchange of Liaison Officers (LO) (1998) It sets out arrangements with respect to the exchange of LOs.
- BPG# 407. Agreement among U.S. Navy, U.S. Marine Corps and the Department of National Defence of Canada concerning Fuel Exchange Replacement-In-Kind (1986) It establishes the policy and procedures for fuel exchange on a Replacement-in-Kind and/or reimbursable basis.
- BPG# 408. MOU between the National Imagery and Mapping Agency of the U.S. Department of Defense and the Department of National Defence of Canada concerning Global GEOSPATIAL Information and Services (GGIS) Cooperation (No date) It forms the basis for cooperative measures to be taken to satisfy mutual national (defense) interests in GGIS for standardization, rationalization and interoperability in products, data, publications, related GGIS materials and equipment, technology and production procedures, and to improve mutual conventional defense capabilities.
- BPG# 409. MOU among the Department of Defence of Australia, the Department of National Defence of Canada, the New Zealand Defence Force, the U.S. Department of Defense, and the Ministry of Defence of the U.K. for Information Assurance and Computer Network Defense (2002) (5-Eyes) It sets forth the organization and requirements of a five-nation joint military communications-electronics (C-E) organization whose mission is the coordination of military C-E matters.
- BPG# 410. MOU among the U.S. Coast Guard, the U.S. Air Force, the Canadian Forces and the Canadian Coast Guard on Search And Rescue (SAR) (1995) It sets forth roles and responsibilities for cooperation relating to air SAR operations along the common boundary of Canada and U.S.
- BPG# 411. MOU for Co-Operation among Canada, the U.S. and U.K. concerning Search & Rescue (SAR) (1999) It sets forth roles and responsibilities for cooperation relating to air SAR operations along the common boundaries of the participating countries.
- BPG# 412. MOU between the Government of Canada and the Government of the U.S. concerning Strategic Joint Exchange (1985) It ensures, to the fullest extent possible, the exchange of unclassified strategic technical data and the protection of such data in order to best utilize the industrial, scientific and technical resources of the joint Canada-U.S. defence base in the mutual defence interests of the two countries.
- BPG# 413. Joint Terms of Reference for the U.S.-Canada Joint Certification Program (JCP) (1986) It establishes a JCP and guidelines to certify contractors of each country for access, on an equally favorable basis, to unclassified technical data disclosing critical technology governed in the U.S. by DoDD 5230.25 and in Canada by the Technical Data Control Regulations.
- BPG# 414. MOU between U.S. Department of Defense and Department of National Defence of Canada concerning the CANUS Test and Evaluation Program (1993) It sets forth responsibilities for the reciprocal use of agreed test sites, including training areas and ranges and airspace for the Test and Evaluation of Weapon Systems.

- BPG# 415. MOU among the Department of Defence of Australia and the Department of National Defence of Canada and the Ministry of Defence of the U.K. of Great Britain and Northern Ireland and the U.S. Department of Defense regarding Assignment of Military Personnel to the 2nd Space Warning Squadron (2SWS), Buckley Air National Guard Base, Colorado (2000) It provides for assigning Australian, Canadian and U.K. military personnel to operational positions at the Space Based Infra-Red System Mission Control Station 2SWS, 21st Operations Group, 21st Space Wing at Buckley Air National Guard Base, Colorado.
- BPG# 417. U.S. Department of Defense Letter re: Canadian Forces (CF) Access to Missile Defense Information (2004) It clarifies the support role and training requirement of CF assigned to NORAD to receive necessary missile defense-related training and information required to support Integrated Tactical Warning and Attack Assessment in a fully integrated and seamless fashion.
- BPG# 418. Supplementary Arrangement between U.S. Air Force and the Canadian Forces on Integrated Threat Warning /Attack Assessment (ITW/AA) System Implementation for MILSTAR (No date) It addresses the modernization of certain elements and subsystems of the ITW/AA system and the establishment of secure survivable links between the National Command Authority of Canada and the U.S. as part of a larger program to upgrade NORAD ITW/AA capabilities.
- BPG# 419. Administrative Arrangement between NORAD, 381st Training Group and 533rd Training Group (1997) It establishes relationships and procedures with regard to Canadian Forces assigned to NORAD and performing duties with the 381 TRG/533 TRS in support of NORAD missions.
- BPG# 420. Statement of Intent between the U.S. Department of Defense and the Department of National Defence of Canada for Defence Space Cooperation (DSC) (1998) It acknowledges the intent to formally negotiate a defense space cooperative agreement, MOU or other arrangement to establish the legal and political framework for development of future defense space cooperation.
- BPG# 430. Agreement between Governments of U.S. and Canada relating to the Installation, Operation & Maintenance of a Circuit for Narrative Record Traffic between the Defense Agencies (1976) It prescribes the provisions under which both parties will install, operate, and maintain a circuit for TOP SECRET narrative record traffic.
- BPG# 431. Lease of Radar Sets (AN/PPS-15) to Canadian Forces by U.S. Navy (1975) It prescribes the general provisions and terms of lease of three AN/PPS-15 Radar Sets.
- BPG# 432. Agreement between U.S. Department of the Navy and Canadian Department of National Defence Production relating to the Performance Evaluation of a Variable Depth Sonar System in conjunction with a High Speed Surface Vessel (Project HYTOW) (1977) It sets forth arrangements for a cooperative project to evaluate the performance of a variable depth sonar system in conjunction with a high speed surface vessel in order to determine the potential of the vessel in the anti-submarine role.
- BPG# 438. Agreement between U.S. National Aeronautics and Space Administration and Department of Transport Canada on Cooperation in connection with Inter-Continental Testing with Experimental Communications Satellites (1963) It concerns testing of experimental satellites.
- BPG# 454. Supplementary Arrangement on North American Air Defense Modernization (NAADM) between the U.S. Air Force and the Canadian Forces on Cost Sharing Reconciliation (1987) It provides the mechanism through which participants can monitor their expenditures on agreements on cost sharing for the individual NAADM components and the overall NAADM project.
- BPG# 464. Amendment No 2 to the MOU between the Secretary of Defense of the U.S.A. and the Secretary of State for Defence of the U.K. of Great Britain and Northern Ireland concerning the Cooperative Framework for System Development and Demonstration (SDD) of the Joint Strike Fighter (JSF) (2002) It establishes the detailed provisions concerning the responsibilities and benefits for JSF SDD.

- BPG# 473. Acquisition and Cross-Servicing Agreement between the Department of Defense of the U.S.A. and Supreme Allied Commander Atlantic concerning Mutual Logistic Support (1997) It facilitates reciprocal logistic support to be used primarily during combined exercises, training, deployments, operations, other cooperative efforts, and for unforeseen circumstances or exigencies to the military forces of the participants.
- BPG# 474. MOU between U.S. Department of Defense and Canada Department of National Defence pertaining to Coordination of Cooperative Research & Development (1979) It establishes arrangements for close collaboration to complement the cooperative program in naval defense research and development established in accordance with the various defense production and development sharing arrangements which exist between Canada and the U.S.
- BPG# 476. Mutual Support Agreement between the U.S. Forces, Europe, and the Canadian Forces Europe (1983) It sets forth specific procedures for logistic support, supplies and services in the inventory or otherwise under the jurisdiction and control of participant military forces in Europe and adjacent waters.
- BPG# 582. Administrative Agreement between North American Aerospace Defense Command (NORAD) and U.S. Space Command (USSPACECOM) regarding the Employment of Canadian Forces (CF) Personnel Performing NORAD duties in USSPACECOM (1998) It establishes relationships and procedures with regard to CF personnel assigned to NORAD and performing duties in USSPACECOM to support the NORAD mission of the mutual aerospace defense of North America.
- BPG# 633. MOU between the Department of Defense of the U.S.A. and Department of National Defence of Canada for North American Technology and Industrial Base (NATIB) Activities (2001) It defines and establishes the general principles which apply to the initiation, conduct, and management of NATIB activities.
- BPG# 642. Memorandum for Record - Appendix A to I-1 of ASCC Instructions Concerning Royal Air Force, Royal Canadian Air Force and U.S. Air Force Standardization Procedures for Mutual Defense (1948) It outlines discussions on the subject of standardization to ensure that in a future war there will be no material or technical obstacles to full cooperation for mutual defense among the three countries and to obtain the greatest possible economy in the use of combined resources and effort.
- BPG# 643. Letter between U.S. Department of Defense and Canada Department of National Defence outlining Procedures to be followed for Joint CANUS Priorities System Procedure for Mutual Defense (1950) It sets forth priorities, and provides guidance for assistance in the procurement of material defense contracts between Canada and the U.S.
- BPG# 644. Letter between U.S. Inspection Division Signal Corps Procurement Agency and Canada Department of National Defence Inspection Services concerning Exchange of Inspection Service Agreement (1951) It sets forth an agreement for exchange of inspection services, reimbursement, and general procedures.
- BPG# 645. Agreement between Deputy Minister of Production (Canada) and U.S. Assistant Secretary Army Logistics, Assistant Secretary Navy (Material) and Assistant Secretary Air Force (Material) concerning Mutual Defence Cost Contract Policy for Military Departments (1956) It is intended to review the policies and procedures outlined in the original agreement dated 18 February 1952 with respect to all contracts for supplies and services placed with the Canadian Commercial Corporation by the U.S. Military Departments.
- BPG# 646. Letter from Department of Defense Production concerning amendment to the Agreement on Mutual Defence Cost Contract Policy for Military Departments issued 26 February, 1952 (1953) It amends the original Agreement regarding profit and net gain resulting from fluctuations in exchange rates on contracts covered by the Agreement. .

- BPG# 647. Letter Agreement between Deputy Minister of Defence Production (Canada) and U.S. Assistant Secretary Army (Logistics), Assistant Secretary Navy (Material) and Assistant Secretary Air Force (Material) concerning Mutual Defence Cost Contract Policy for Military Departments (1952) It sets forth benefits to participants of the “Statement of Principles for Economic Cooperation” as to the policies and procedures to be followed regarding purchases through the Canadian Commercial Corporation and Military Departments.
- BPG# 648. Letter Agreement between Deputy Minister of Defence Production (Canada) to U.S. Assistant Secretary Army (Logistics), Assistant Secretary Navy (Material) and Assistant Secretary Air Force (Material) concerning Mutual Defence Inspection Expenses Agreement (1957) It outlines proposed changes to Agreement relating to the Military Departments providing inspection services and inspection facilities in connection with contracts placed by either military in either participant country.
- BPG# 649. Letter Agreement between Department of Defense Production (Canada) outlining Procedures Relative to and Interpretation of the Letter Agreement dated 18 February, 1952 between the U.S. Military Departments and the Department of Defense Production (1952) It sets forth procedures relative to and interpretation of the Letter of Agreement 18 Feb 1952 regarding contracts covered, profit limitation, quotations and prices, profit and/or loss arising out of foreign exchange fluctuations, surcharges, audits, inspection, amortization or rental of capital equipment, tooling, and customs duties, sales and excise taxes.
- BPG# 651. Basic Arrangement on Collaboration in Research and Development between the U.S. Air Force and the Defence Research Board of Canada / Royal Canadian Air Force (1958) It establishes policies and procedures for collaboration in research and development and is intended to cover the broad aspects of collaboration.
- BPG# 652. Reciprocal Inspection Services Agreement between U.S. Air Force and Canada Department of National Defence (1956) It prescribes procedures for the exchange of inspection services.
- BPG# 658. Exchange of Notes between Canada and the U.S. concerning Cost-Sharing and Related Arrangements with Respect to Planned Improvements in the Continental Air Defence System (1961) It outlines the conditions governing the financing, installation and operation of facilities in Canada required to strengthen and extend the Continental Air Defence System.
- BPG# 661. Letter Agreement between Canadian Chief of the Air Staff and U.S. Chief U.S. Air Force (USAF) Central Coordinating Staff-C concerning the request for the Establishment of Satellite Tracking Station at Royal Canadian Air Force (RCAF) Station in Namao (1962) This Agreement specifies RCAF Station Namao as the most desirable location for a USAF satellite tracking station in western Canada.
- BPG# 662. Letter from the U.S. Department of the Air Force concerning USAF-RCAF Exchange Officer (EO) Program - Financial Arrangements (corrected copy) (1953) It states the terms of agreement reached concerning the liability of the host and parent service in connection with the costs of temporary duty travel performed by EOs.
- BPG# 663. Administrative & Financial Arrangement between the Canadian Army (Regular) and the U.S. Air Force concerning the Maintenance and Operation of the Churchill Research Range at Fort Churchill, Manitoba, Canada (1963) It sets out the arrangements which amplifies and confirms the provision of the Canadian Joint Organization Order, within the limitations of the intergovernmental agreement referenced.
- BPG# 664. Statement of Conditions to Govern Cross-Servicing between U.S. Navy and Royal Canadian Navy (1964) It sets forth articles of agreement for routine port services and routine airport services assistance by a naval authority of one of the Governments without charge, provided such services are furnished by military personnel and equipment without direct cost to the host Government.

- BPG# 665. Agreement between the U.S.A. and the Government of Canada Concerning Financial Arrangements for the Furnishing of Certain Supplies & Services to Naval Vessels and Aircraft (1964) It promulgates information and guidance on a reciprocal agreement for the provision of certain supplies and services to naval vessels and aircraft of either country when visiting the other.
- BPG# 667. Agreement for Operational Cooperation between the U.S. Air Force Military Air Transport Service and the Royal Canadian Air Force Air Transport Command (1965) It defines those areas in which closer cooperation between the single manager operating agency for airlift service is possible and to establish procedures for implementing such cooperation.
- BPG# 668. Detailed Working Procedures for the Implementation of the Agreement for the Operational Cooperation between the U.S. Air Force Military Airlift Command and the Canadian Forces Air Transport Command (1973) It revises an agreement dated 17 May 1965 to request assistance directly from one another in utilizing the normal airlift operations of each command.
- BPG# 669. Amendment One to Agreement between the Canadian Forces and the U.S. Air Force for the Sharing of Costs of Communications Facilities (1968) It amends the Agreement by adding a provision re the method of implementing cost-sharing and apportionment.
- BPG# 671. MOU between Contract Administration Services Region, Detroit and Department of National Defence (DND), Canada (1966) It outlines reciprocal methods and procedures necessary to accomplish the desired quality assurance required on contracts and/or purchase orders in respect to the Department of Defense and the DND Canada procurement, and procurement by other Government Departments and Agencies.
- BPG# 672. Agreement between the U.S. and Canada concerning Conditions and Procedures for Qualification of Products of Non-Resident Manufacturing (1967) It states the conditions and procedures which will be used to list products of Canadian manufacturers on Qualified Products Lists (QPL) maintained by the preparing activities of the Military Departments of the U.S. or their agents and to list products of U.S. manufacturers on QPL maintained by the preparing activities of the Department of National Defence of Canada or their agents.
- BPG# 673. Memorandum of Agreement between U.S. Defense Communications Agency and Canadian Forces HQs relating to Coordination and Liaison Functions of Defense Communications Agency (DCA) DCA-NOR in Canada (1967) It constitutes an agreement relating to coordination and liaison functions of DCA-NOR located in Ottawa, Ontario, Canada.
- BPG# 674. MOU between the Aerospace Defense Center (U.S. Air Force) and the Province of Nova Scotia concerning the Handling of Legal Matters within the Province of Nova Scotia IAW NATO SOFA It sets forth agreements for handling legal matters within the province according to the North Atlantic Treaty, SOFA, and exercise of jurisdiction over members of the forces, civilian component and their dependents.
- BPG# 678. Amendment number 1 to Mapping, Charting and Geodesy Agreement between Defense Mapping Agency, U.S. Department of Defense and Directorate of Cartography, Department of National Defence, Canada dated 24 Aug 1976 (1989) It defines and provides for additional annexes to arrangements for cooperative research and development which promotes further cooperation in exchange and cooperation of mapping, charting and geodesy products and services under the Digital Chart of the World Initiative. This amendment includes Annex D 'Cooperative Development of the Digital Chart of the World' which defines arrangements for cooperative research and development which promotes further cooperation in exchange and co-production of mapping, charting and geodesy products and services under the Digital Chart of the World (DCW) initiative.
- BPG# 680. Mapping, Charting and Geodesy Agreement Annex E Digital Nautical Chart Cooperation between U.S. Defense Mapping Agency and Canada Directorate of Geographic Operations (1995) It defines arrangements for the cooperation, production support, responsibilities, and exchange of Digital Nautical Chart and related supplemental data of mutual interest.

- BPG# 681. Mapping, Charting and Geodesy Agreement Appendix 1 to Annex B to Add Aeronautic Funding between U.S. Department of Defense and Canada Department of National Defence (1997) It provides Enclosure One to Appendix I to Annex B, Production, Delivery and Payment Schedule for Fiscal Year 1997 Funding.
- BPG# 682. Mapping, Charting and Geodesy Agreement Appendix 1 to Annex A Added Funding Geomatics between U.S. Department of Defense and Canada Department of National Defence (1998) It provides Enclosure One to Appendix I to Annex A, Production, Delivery and Payment Schedule for Fiscal Year 1998 Funding.
- BPG# 683. Mapping, Charting and Geodesy Agreement Appendix 2 to Annex A Database Generalization Capability between U.S. Department of Defense and Canada Department of National Defence (1999) It provides Enclosure 1 details, references, modifications, and responsibilities to participants for Appendix 2 to Annex A of the Mapping, Charting and Geodesy Agreement concerning the Development of a Database Generalization Capability. This Appendix 2 to Annex A modifies Annex A published under the original agreement dated 24 Aug 1976
- BPG# 684. MOU between the Department of National Defence and the Earth Sciences Sector of Natural Resources Canada concerning Cooperation on Geomatics Products & Services related to Mapping (1999) It establishes the framework of cooperation to: provide, one to the other, products and services, as mutually determined between the participants, in support of Canadian mapping and charting requirements; support cooperative programs and technical arrangements by mutual arrangement between the participants for efficiency and economy in mapping in the best national interest; exchange information and expertise on mapping and geomatics activities; enter into joint projects and cost sharing arrangements as opportunities occur; make available unique government facilities and equipment for developing projects as required; and encourage and coordinate to development of common mapping and geographic information systems standards.
- BPG# 685. MOU between the U.S. Department of Defense and Department of National Defence, Canada concerning Reciprocal Administration re Procurement Contracts (1984) It outlines reciprocal methods and procedures necessary to implement technical services required on contracts and/or purchase orders and procurement by other Government Departments and Agencies.
- BPG# 686. Information Exchange Project between the U.S. and Canada concerning Combat Information Center (CIC) and/or Action Information Organizations (AIO) (1971) It governs the exchange of information on all aspects of the CIC and/or the AIO, operational requirements, development of tactics and doctrines, and exchange of technical information.
- BPG# 687. Search & Rescue (SAR) Agreement between Commander in Chief, Alaska and Commander, Canadian Maritime Forces Pacific concerning Prosecution of Search and Rescue Incidents in the Alaska-Canada Border (1971) It provides for an agreement, defines regions, and responsibilities for the prosecution of SAR incidents which occur in the Alaska – Canada border area.
- BPG# 688. Mapping, Charting, Geodesy Agreement Appendix 1 to Annex E Digital Nautical Chart (DNC) between U.S. Department of Defense and Canada Department of National Defence (1998) This amendment to Annex E, dated 22 May 1995 facilitates completion of the Canadian portion of DNC co-production.
- BPG# 689. Mapping, Charting, Geodesy Agreement, Change 1 to Annex E concerning Coproduction, Exchange, Maintenance and Distribution of Digital Chart between U.S. Department of Defense and Canada Department of National Defence (1997) This change 1 to Annex E was published to clarify that DNC CD Region “29” should read “28”.

- BPG# 691. Information Exchange Project relating to Explosive Ordnance Disposal (EOD) & Related Diving among Militaries of U.S., Canada and Australia (1970) It describes project for the exchange of information and hardware in the field of EOD and related diving to facilitate the study and comparison of procedures to examine the possibility of standardization of procedures, methods and equipment for EOD operations, including diving.
- BPG# 692. Information Exchange Project relating to Systems Used for Controlling Surface Ships & Their Machinery (1970) It describes project for the exchange of information among militaries of U.S., Canada and UK concerning systems for controlling surface ships and their machinery subject to laws and rules of participating countries exclusive of that pertaining to nuclear propulsion.
- BPG# 694. Agreement between the U.S. Defence Communications Agency and the Canadian National Defence HQ for Joint Military Communications Management in Support of Defense of North America (1975) It combines and implements all previous agreements relating to establishment, operation and management of Joint Military Switched Voice Communication requirements in Canada and the U.S.; exchange of materiel and personnel, communication liaison requirements and separate National Communication requirements in support of Joint Military Communication requirements.
- BPG# 696. MOU concerning the Exchange of Personnel between the U.S. Navy and the Canadian Forces (1988)
This MOU provides a system of mutual exchange of Service personnel which the experience, professional knowledge and doctrine are shared to the maximum extent possible under existing laws and policies of the participating countries.
- BPG# 697. MOU between the U.S. Navy and the Department of National Defence concerning Supplementary & Administrative Arrangements for the operation of the Torpedo Test Ranges in the Strait of Georgia (2002)
This supplementary document relates to the Agreement dated 12 May 1965 for the operation and maintenance of the Torpedo Test Ranges located in the Strait of Georgia and Jervis Inlet.
- BPG# 698. Information Exchange Project C-22 between the Canada Department of National Defence and the U.S. Navy concerning Undersea Surveillance Systems Research and Development (1977) It governs the exchange of scientific and technical information on undersea acoustic surveillance systems of mutual interest in relation to the defence of North America. It includes exchange of R&D information and the associated technical data as related to fixed, mobile and deployable surveillance systems in those ocean areas contiguous to North America which are of mutual interest to the U.S. and Canada.
- BPG# 699. Memorandum of Agreement (MOA) on the Exchange of Military Personnel between the U.S. Coast Guard and the Canadian Armed Forces (1977) It provides the general conditions for mutual exchange of military personnel whereby the experience, professional knowledge and doctrine of both Services are shared to the maximum extent permissible under existing policies of the participating countries.
- BPG# 700. MOU between the U.S. Department of the Air Force and the Canadian Department of National concerning Regional Operations Control Centers (ROCC) (1977) It establishes basic terms and conditions for the Joint ROCC and defines the areas of joint participation in the development and acquisition of equipment, system support elements, and general terms and conditions to accomplish the program.
- BPG# 704. MOU between the Department of Defense of the U.S.A. and the Department of National Defence, Canada concerning Direct Financial Billing for Aviation Fuel (2003) It defines the procedures to perform direct financial billing to each other for aviation fuel received by either participant's military forces, and other authorized customers, at land bases, at sea, or in the air, at any approved location.
- BPG# 705. Arrangement between the Department of National Defence of Canada and the U.S. Department of the Air Force concerning Aviation Fuel Service Accounting (1979) It describes responsibilities for an established accounting system wherein all transactions in aviation fuel and/or oil between the Canadian Forces and the U.S. Air Force will be recorded, maintained, and audited.

- BPG# 706. Memorandum of Agreement on the Exchange of Military Personnel between U.S. Army and Canadian Armed Forces (1976) It establishes a system of mutual and reciprocal exchange of personnel.
- BPG# 707. Annex A to General Technical Agreement for Lines of Communication (LOC) between the U.S. and Canada dated 8 June 1979 concerning Technical Arrangement for Personnel (1980) It applies to selected personnel assigned within the Integrated LOC in support of the NATO regarding personnel guidance, policy and procedure, and a guide for supporting plans.
- BPG# 708. Annex B to General Technical Agreement for Lines of Communication between the U.S. and Canada dated 8 June 1979 concerning Technical Arrangement for Transportations, Supply and Services (1982) It provides broad policy and procedural guidance concerning transportation, supply and services to ensure effective implementation of the provisions of the Technical Agreement.
- BPG# 710. Memorandum of Agreement on the Exchange of Personnel between the U.S. Air Force and the Canadian Forces (1998) It provides a system of mutually beneficial exchanges of personnel to maintain an active relationship which the experience, professional knowledge, and doctrine of both Services are shared to the maximum extent permissible under existing policies, laws and regulations of the participants.
- BPG# 711. MOU between U.S. Department of Defense and Canada Department of National Defence re the Canadian Purchase of CF-18 Weapon System (1981) It sets forth guidelines and support for Canadian purchase of the CF-18 weapon system to the extent permissible by U.S. law and policy including weapon system definition, logistic support, training, computer software, data services and facilities required for deployment and support of the CF-18 aircraft.
- BPG# 712. Information Exchange Project concerning Maritime Patrol Aircraft Systems Standardization (MPASS) and Interoperability between the Canadian Forces and the U.S. Navy (1982) It governs the exchange of information on MPASS and Interoperability by the participating countries, specifically regarding information that can be exchanged and the exclusion of production information that cannot.
- BPG# 713. Tab B to App XV to Annex I Search & Rescue (SAR) Agreement between Air Transport Group CF and Seventeenth Coast Guard District USCG concerning Operation Plan for the Edmonton SAR Region & Juneau SAR Sector (1982) It describes terms of agreement regarding responsibilities, coordination and execution of SAR in their respective and adjacent areas of responsibility in the Arctic.
- BPG# 714. MOU between the U.S. Air Force Sacramento Air Logistics Center and the Canadian Forces National Defence HQ on the Joint System Management of Region Operations Control Center (ROCC) (1982) It ensures the ROCC system remains interoperable during its life cycle.
- BPG# 715. MOU between the Department of Defense of the U.S.A. and the Department of National Defence of Canada for Test & Evaluation Program (TEP) Cooperation (2002) It establishes a comprehensive framework for implementing a program of cooperation on mutually determined topics related to defense Test & Evaluation.
- BPG# 716. Project Arrangement between the Department of Defense, U.S.A and the Department of National Defence, Canada concerning Procedures for Air-Launched Cruise Missile (ALCM) testing in Canada (1985) It outlines the procedures for ALCM testing in Canada, identifies the resources and facilities required, terms and conditions, and limitations of the project arrangement.
- BPG# 717. Change 1 to Project Arrangement between the Department of Defense, U.S.A and the Department of National Defence, Canada concerning Procedures for Air-Launched Cruise Missile (ALCM) testing in Canada (1986/87) It constitutes Change 1 to the ALCM Project Arrangement regarding public affairs guidance and responsibility.

- BPG# 718. Change 2 to Project Arrangement between the Department of Defense, U.S.A and the Department of National Defence, Canada concerning Procedures for Air-Launched Cruise Missile (ALCM) testing in Canada (1988) It constitutes Change 2 to the ALCM Project Arrangement regarding aircraft support, instrumentation and data required, pre-mission procedures, additional mission considerations, annual requirements, and public affairs as well as support costs for FY'88.
- BPG# 719. Change 3 to Project Arrangement between the Department of Defense, U.S.A and the Department of National Defence, Canada concerning Procedures for Air-Launched Cruise Missile (ALCM) testing in Canada (1989) It constitutes Change 3 to the ALCM Project Arrangement regarding duration of arrangement and test periods, test objectives, general test method, pre-mission procedures, mission procedures, and post-mission procedures, as well as costs for FY'89.
- BPG# 720. Restatement of the MOU between U.S. Department of Defense and Canada Department of National Defence relating to the CANUS Test & Evaluation Program Incorporating Agreed Upon Amendments (1984) This is a general implementation agreement for the use of test sites, training areas and ranges and Canadian airspace for the test and evaluation of Department of Defense weapons, equipment and tactics, concluded in an exchange of notes between participants.
- BPG# 721. MOU between the Canadian Forces and the U.S. Air Force Space Command concerning Support to Canadian Forces from Thule, AFB Greenland (1983) It sets forth terms, requirements for accomplishment, and conditions for the conduct of certain military operations in northern Canada, where logistic facilities are sparse and support to such operations are to be carried out from and/or through the U.S. Air Force facilities at Thule Air Base, Greenland.
- BPG# 722. Memorandum of Agreement on the Participation of Canadian Forces Personnel in the Observation of U.S. Navy F/A-18 Accident Investigation and Participation of the U.S. Navy Personnel in the Observation of Canadian Forces CF 18 Accident Investigations (1984) It establishes procedures which allow personnel designated by the safety facilities of both countries to observe each other's F/A-18 accident investigation techniques while ensuring confidentiality of privileged information intended to improve investigative procedures and techniques of the participants in furtherance of aviation safety in general, and the prevention of F/A-18 mishaps in particular.
- BPG# 723. MOU between NORAD and the National Defence Headquarters concerning the Canadian Forces Warning & Reporting System (CFWRS) Information Exchange (1984) It identifies and fixes the functions, responsibilities and working relationships of the NORAD and the CFWRS to ensure the mission of warning the Canadian public of an enemy attack is accomplished and provide for the exchange of emergency operational information between CFWRS and the NORAD Nuclear Biological Chemical Warning and Reporting System (NBCWRS).
- BPG# 724. Master Data Exchange Arrangement between U.S. Department of Defense and Canada Department of National Defence for the Mutual Development of Weapons Systems (1984) It provides for data exchange for weapons systems development.
- BPG# 725. MOU on the Exchange of Service Personnel between the U.S. Marine Corps and the Canadian Forces (1984) It provides a system of mutual exchange of Service personnel to establish an active relationship by which the experience, professional knowledge and doctrine of the Services are shared to the maximum extent permissible under existing policies of the participants.
- BPG# 726. Cooperative Production Arrangement between the Defense Mapping Agency and the Directorate of Cartography concerning the Production of Digital Terrain Elevation Data (DTED) (1984) It defines arrangements and authorities for the cooperative production of DTED, DMA, Level I and II.
- BPG# 727. MOU between the Canadian Forces (CF) and the U.S. Marine Corps (USMC) on Reciprocal Training of USMC/CF Reserve Officers (1985) It sets out arrangements under which Militia and Reserve personnel receive reciprocal training at Staff Colleges, and replaces informal understandings relating to reciprocal staff college training.

- BPG# 728. MOU between the U.S. National Guard Bureau and the Canadian Department of National Defence regarding the Joint Training Program of Transport Aircraft Units (1986) It sets forth terms and conditions which govern joint regular route and tactical programs of transport units in the U.S. and Canada. The program is designed to increase the expertise and esprit de corps of the units involved; to develop appreciation for the tactics and techniques of other Forces; to gain experience in varying terrain and climatic conditions; and, to provide meaningful contact between tactical and strategic transport units of the U.S. Air National Guard and the Canadian Armed Forces.
- BPG# 729. MOU between the U.S. Army Training and Doctrine Command (USA TRADOC) and the Canadian Forces concerning the Establishment of USA TRADOC Command Liaison Office at National Defence Headquarters (NDHQ), Director General Land Force Development (1993) It details arrangements in establishing a USA TRADOC Liaison Office at NDHQ Director General Land Force Development.
- BPG# 730. MOU between the Commander Maritime Command and the Commander-in-Chief Atlantic Fleet concerning the Joint Manning and Operating of Naval Control of St Lawrence Shipping Office (1986) It promulgates arrangements for joint manning and operating of the Naval Control of Shipping Office at Montreal; delineates command relationships; and deals exclusively with naval control of shipping operations and related functions within the area assigned.
- BPG# 731. MOU between the Department of Defense of the U.S.A. and the Department of National Defence of Canada concerning Reciprocal Arrangements for the Provision of Health Care Services (2002) It extends terms and conditions of original Arrangement (1993) concerning exchange of comparable medical and dental care for military members in each others' country. Arrangement extended through 2007.
- BPG# 732. North American Air Defense Modernization (NAADM) Supplementary Arrangement between the U.S. Air Force and the Canadian Forces on the Co-Manning of Over-the-Horizon Backscatter (OTH-B) Radar System (1987) It provides for division of responsibility and objectives concerning co-manning of the OTH-B radar system in conjunction with arrangements on cost sharing reconciliation.
- BPG# 733. North American Air Defense Modernization (NAADM) Supplementary Arrangement between the U.S. Air Force and the Canadian Forces on Co-Manning of the U.S. E-3 Airborne Warning and Control System (AWACS) (1993) It details general terms and conditions for accomplishing co-manning procedures for the U.S. E-3 AWACS with Canadian and U.S. personnel pursuant to the MOU on the Modernization of the NNAADM MOU and Exchange of Notes between the Governments of Canada and the U.S.
- BPG# 734. Annex to the Master Data Exchange Arrangement between the U.S.A. Department of Defense and the Canadian Department of National Defence concerning the Armoured Vehicle General Purpose (AVGP) and Light Armoured Vehicle (LAV) Fleets of Vehicles (1984) It provides for an exchange of information concerning the engineering, manufacturing, maintenance and operation of the AVGP/LAV vehicle fleets with right to disclosure limitations.
- BPG# 735. MOU among the U.S.A., Canada, Germany, Portugal, U.K., and Netherlands concerning Atlantic Minimum Communications Crossing (1989) It establishes procedures to be used by signatory countries in the control and coordination of U.S. Military Airlift Command (MAC) aircraft conducting Atlantic Minimum Communications crossings of Atlantic to Europe, including MAC assigned assets, Civil Reserve Air Fleet and Strategic Air Command Tanker support for MAC refueling, at times during which normal ICAO procedures apply.
- BPG# 736. MOU between the U.S. Navy and the Department of National Defence of Canada concerning Canadian Participation in the Manning of the U.S. Naval Ocean Processing Facility Whidbey Island, WA (2000) It describes arrangements for co-manning the facility, sharing oceanographic research experience, professional knowledge and doctrine of participants to the maximum extent permissible under existing laws and policies of both countries.

- BPG# 737. Agreement between Director Air Traffic Services, Director Air Regulation and Traffic Services (DND) and Chief Airspace and Air Traffic Services Division, Directorate of Operations, U.S. Air Force concerning the Establishment of Air Refueling & Air Traffic Control, Separation Minima (1988) It sets forth policy and criteria for establishment of air refueling tracks, air traffic control procedures, and separation minima. Administrative guidelines are also provided concerning the design, development, coordination, and publication of air refueling tracks established for use by the U.S. Air Force.
- BPG# 738. Extension of Data Exchange Annex on Airbreathing Propulsion and Integration Test & Evaluation between U.S. Department of Defense and Canada Department of National Defence (2000) It acknowledges mutual consent to extend Data Exchange Annex for an additional five years.
- BPG# 739. North American Air Defense Modernization (NAADM) Supplementary Arrangement between the U.S. Air Force and the Canadian Forces on Integrated Tactical Warning/Attack Assessment (ITW/AA) System Implementation for the Survivable Communications Integrations System (SCIS) and the Processing and Display Subsystem (PDS) (1995) It sets forth terms and conditions for the SCIS and the PDS; addresses the modernization of certain elements/subsystems of the ITW/AA system and establishment of secure survivable links between the National Command Authorities of Canada and the U.S.; and ensures that elements of the warning systems are compatible with the newer equipment being purchased.
- BPG# 740. North American Air Defense Modernization (NAADM) Supplementary Arrangement between the U.S. Air Force and the Canadian Forces on Operation, Maintenance (O&M) and Support of the North Warning System (NWS) (1995) It sets forth terms and conditions concerning O&M, and modernization of the NWS.
- BPG# 741. Amendment 1 to the North American Air Defense Modernization (NAADM) Supplementary Arrangement between the U.S. Air Force and the Canadian Forces on Operations, Maintenance (O&M) and Support of the North Warning System (NWS) dated 25 October 1995 (2001) It amends the NAADM Supplementary Arrangement on O&M and Support of the NWS dated 25 Oct 1995 regarding allocation of functions by deleting several charts and replacing them as described within Amendment 1.
- BPG# 742. Amendment 2 to the North American Air Defense Modernization (NAADM) Supplementary Arrangement between the U.S. Air Force and the Canadian Forces on Operations, Maintenance (O&M) and Support of the North Warning System (NWS) dated 25 October 1995 (2004) It amends the NAADM Supplementary Arrangement on O&M and Support of the NWS dated 25 Oct 1995 regarding allocation of functions by deleting several paragraphs and replacing them as described within Amendment 2.
- BPG# 743. MOU between the Department of National Defence of Canada and the Department of Defense of the U.S.A. for the Provision of Administrative and Logistics Support to U.S. Air Force 722 Support Squadron located at 22 Wing Canadian Forces Base North Bay (No date) It establishes the provisions under which administrative and logistic support will be provided by the participants to U.S. Air Force 722 Support Squadron.
- BPG# 744. MOU between the Department of Defense of the U.S.A. and the Department of National Defence of Canada concerning the Exchange of Defence Professional Personnel (1991-2003) It provides guidelines and limitations for on-site working assignments to selected scientists, engineers and logisticians or other personnel as identified and mutually decided upon for exchange to the greatest extent possible.
- BPG# 745. Master Data Exchange Arrangement (MDEA) for the Mutual Development of Weapons Systems Annex No N-04-CN-4511 (Maritime Helicopter Systems Standardization and Interoperability) between U.S. Department of Defense and Canada Department of National Defence (2004) It amends the MDEA signed 10 Apr 1984 to include exchange of information on technical and research and development aspects necessary to upgrade military materiel and munitions described within.

- BPG# 746. Master Data Exchange Arrangement (MDEA) for the Mutual Development of Weapons Systems Annex No DEA-AF-90-CA-7006 (Research and Development in Crew Technology for Military Aircraft) between U.S. Department of Defense and Canada Department of National Defence (1995) It amends the MDEA signed 10 Apr 1984 to include exchange of information on the research, development, test and evaluation of crew technology for new aircraft or new mission requirements.
- BPG# 748. MOU among the Department of National Defence of Canada and the Department of Defense of the U.S.A. and the Department of Defence of Australia concerning Cooperative Implementation of Project Cost & Schedule Performance Management Principles in Defense Contracting MOU (1995) It sets forth guidelines and conditions for objectives, scope, implementation and management, cost of participation, promulgation, visits and access, participation, disputes, and amendment, termination and withdrawal for mutual benefits to be gained from enhancing collaboration in development and implementation of widely accepted principles for management of complex projects in Government and industry among the participants.
- BPG# 749. Letter of Intent among U.S. Department of Defense, Canada Department of National Defence and others to Cooperate on Continuous Acquisition & Lifecycle Support (CALs) re: Weapons (1994) It examines specific common projects and determine the nature of possible cooperative CALs efforts for common systems.
- BPG# 750. Master Data Exchange Agreement for Developments of Weapons (Mine Warfare) between U.S. Department of Defense and Canada Department of National Defence (1993/2003) It extends provisions of the agreement through 2008 outlining Canadian and U.S. objectives for information exchange on mine counter-measures and mine warfare for technical and research and development.
- BPG# 751. Master Data Exchange Agreement between U.S. Department of Defense and Canada Department of National Defence for Mutual Weapons Development Annex, Shelters & Organizational Equipment (1999) It provides for, outlines and prescribes authorities for the exchange of scientific and technical information of mutual interest on shelters, organizational and personnel support equipment required by a field army.
- BPG# 752. Master Data Exchange Arrangement between U.S. Department of Defense and Canada Department of National Defence for the Mutual Development of Weapons Systems Annex, Unmanned Aerial Vehicles Systems (2000) It provides for the exchange of information on technical and research and development aspects in the field of unmanned aerial vehicles.
- BPG# 753. North American Air Defense Modernization (NAADM) Supplementary Arrangement between the United States Air Force and the Canadian Forces on Interoperability & Connectivity (1993) The NAADM MOU dated 18 March 1985 establishes mutually agreed baseline requirements of interoperability and connectivity required in support of North American air defense modernization. This supplementary arrangement applies exclusively to: interfacing OTH-B radar systems with the Region Operations Control Centre (ROCC) Sector Operations Control Centres (SOCC); a data interface between ROCC/SOCCs and AWACS; beyond line of sight voice communication linking the ROCC/SOCCs to fighters and AWACS; the augmentation of line-of-sight ground air ground communications for Command and Control purposes; and, the acquisition of new or modified software and hardware for ROCC/SOCCs to accommodate these interfaces.
- BPG# 754. MOU between the Department of Defense of the U.S.A. and the Department of National Defence of Canada for Technology Research & Development Projects (1996) It defines and establishes the general principles which apply to the initiation, conduct, and management of established Technology Research and Development Project and Project Arrangements.

- BPG# 755. MOU between the Department of Defense of the U.S.A. and the Department of National Defence of Canada concerning Measures to be Taken for the Transfer, Security and Safeguarding of Technical Information and Equipment to the Department of National Defence for use in the Canadian Arctic Subsurface Surveillance Systems (ARCSSS) MOU (1994) It provides a security understanding to permit the acquisition of ARCSST UWS Components and Information to include: security procedures for the protection of classified ARCSST UWS Components and Information; provisions for identification of the locations of deployed ARCSST UWS Components; and, provisions concerning the transfer of ARCSST UWS Components and Information to Third Parties.
- BPG# 756. MOU Multilateral Master Information Exchange (MIEA) among Australia, Canada, New Zealand, U.K. and U.S.A Concerning Multilateral Exchange of Research and Development (R&D) Information (1996) It establishes a mechanism for the exchange of operational military Information among the participants on: organization, training, engineering practices and employment of armed forces and systems, including information which may lead to R&D; information related to combined or multilateral military operations, exercises, planning and readiness; information related to force distribution, “order of battle” and tactics to the extent consistent with national and military disclosure laws and policies; military intelligence information; information on operational requirements; and military materiel and munitions information.
- BPG# 757. Charter of the Combined Defense Information Management (CDIMP) (1995) It describes the DISA-DISO purpose, organization and procedures for a forum to ensure the effective and efficient planning, operation, control and maintenance of common strategic information systems.
- BPG# 758. Implementing Arrangement to the Department of Defense of the U.S.A. and the Department of National Defence of Canada regarding Mutual Support MOU between Canadian Forces (CF) and the Nevada Army National Guard (NVARNG) Concerning the Provision of Airlift Support to the Canadian Forces (1994) It authorizes the use of NVARNG assets to airlift equipment as requested by the CF in support of Exercise Maple Flag for insertion and extraction of threat simulators.
- BPG# 759. MOU between the Department of Defense of the U.S.A and the Department of National Defence of Canada for Region/Sector Air Operations Center (R/SAOC) Modernization Program (1996) It outlines program objectives to correct deficiencies that NORAD identified in their air defense computer system and to meet additional requirements as stipulated in the NORAD Operational Requirements Document for R/SAOC modernization.
- BPG# 761. Multilateral Master Military Information Exchange MOU Information Exchange Annex on Ship Materials Technology among U.S. Department of Defense and Canada Department of National Defence and Others (2003/2004) It provides for the exchange of research and development information in Ships Material Technology to include: metallic and non-metallic materials, techniques of their application, related fire and health hazards, and the materials and methods of active and passive protection against corrosion and fouling.
- BPG# 762. MOU between U.S. Navy and the Canadian Forces (CF) concerning Arrangements Pertaining to the Posting to and Employment of a Canadian Forces Member at Pacific Fleet Headquarters, Pearl Harbor, Hawaii (2002) It describes the policies and procedures that will govern a CF member at Pacific Fleet Headquarters to establish and maintain an active relationship between CF and U.S. Navy. It includes terms of reference, tour length, duties, and employment.
- BPG# 763. MOU between the Department of Defense of the U.S.A. and the Department of National Defence of Canada for the Conduct of Open Skies Shared Observation Flights (1996) It defines responsibilities of each participant in the preparation, execution and funding of shared observation flights in support of Open Skies Treaty.
- BPG# 765. MOU among 13 countries for the Cooperative In-Service Support of the Evolved Sea-Sparrow Missile (ESSM) (2000) It outlines scope of work related to: providing cost-effective in-service support for ESSM, identifying changes to improve effectiveness, maintaining common configuration management, maintaining depot level maintenance facilities, and sharing the work undertaken by the participants.

- BPG# 766. Agreement between the Department of Defense of the U.S.A. and the Department of National Defence of Canada relating to Aerial Refueling (1998). It promotes interoperability by providing the framework within which U.S. Transportation Command will provide Canadian Forces (CF) aerial refueling support, and the CF will provide support to U.S. Forces aircraft, during combined exercises, operational missions and deployments.
- BPG# 767. Implementing Arrangement (IA) for The Mutual Use of Logistic Support and Services Concerning Reciprocal Port Services between the Department of Defense of the U.S.A. and the Department of National Defence of Canada (1996) This is an IA under the MOU between the participants concerning Mutual Support dated 30 December 1994. It designates the participants, lists detailed support requirements, provides guidance on agreed upon ordering and billeting formats, and establishes the procedures for the provision of mutual logistic support between the Atlantic Fleets of Canada and the U.S.
- BPG# 768. MOU between U.S. Department of the Navy and the Department of National Defence of Canada regarding Integration of Canadian Forces Health Care Personnel (CFHCP) in U.S. Navy Health Care Facilities (1998) It establishes the provisions by which the participants agree to the clinical integration of CFHCP into U.S. Department of the Navy Health Care Facilities.
- BPG# 764. MOU between the Department of Defense of the U.S.A. and the Department of National Defence of Canada Concerning the Development, Documentation, Production and Initial Fielding of Military Satellite Communications (MILSATCOM) (1999) It sets the basis for long term cooperation on MILSATCOM systems by addressing technical and operational requirements and means.
- BPG# 769. Annex A to the MOU between the Department of Defense (DOD) of the U.S.A. and the Department of National Defence (DND) of Canada concerning the Development, Documentation, Production and Initial Fielding of Military Satellite Communications (MILSATCOM): Annex A-Relating to the Advanced Extremely High Frequency (AEHF) Project It provides the details of the AEHF system description and resource sharing provisions for integrating the DND of Canada's requirements into the DOD MILSATCOM architecture for all four regions.
- BPG# 770. Annex B to the MOU between the Department of Defense of the U.S.A. and the Department of National Defence of Canada concerning the Development, Documentation, Production and Initial Fielding of Military Satellite Communications (MILSATCOM): Annex B-Relating to the Exchange of Cooperative Project Personnel (CPP) It establishes the provisions by which participants will assign CPP (military or civilian personnel) in support of the MILSATCOM program to perform administrative, contracting, logistics, financial, planning or other support functions.
- BPG# 772. MOU between the Department of Defense of the U.S.A. and the Department of National Defence of Canada concerning Procurement of Defense Supplies (1996) It provides that Canada and the U.S. will give full consideration, without any discrimination, to all qualified offers (from each country), and not apply import duties on defense supplies.
- BPG# 773. Implementing Arrangement for The Mutual Use of Logistic Support and Services Concerning Reciprocal Port Services between the Department of Defense of the U.S.A. and the Department of National Defence of Canada (1998) It establishes the procedures for the mutual provision of support and services (port services) between CINCPACFLT and COMMARPAC forces during mutual port visits.
- BPG# 774. Project Arrangement between the Department of Defense of the U.S.A. and the Department of National Defence of Canada for Urban Hazard Prediction and Assessment Capability (HPAC) CB Hazard Model Evaluation (2003) It outlines the tasks, services, and deliverables to be provided for HPAC tests.

- BPG# 775. MOU Among American, British, Canadian, Australian and New Zealand Defense Departments concerning the Combined Joint Multilateral Master Military Information Exchange (2004) It enables the release and exchange of specifically identified military information and data among the participants to enhance collective military preparedness, readiness, capability and interoperability; and it defines protection of that information.
- BPG# 776. Project Arrangement for the Distribution and Fate of Energetics between the Department of Defense of the U.S.A. and the Department of National Defence of Canada (2001) Under the CANUS Test and Evaluation Program MOU, it outlines the tasks, services and deliverables to be provided by the Defence Research Establishment Valcartier for test and evaluation.
- BPG# 777. Amendment 1 to the Project Arrangement between the Department of Defense of the U.S.A. and the Department of National Defence of Canada for the Soil Sampling of Energetics for Defence Research & Development Canada and Development Canada-Valcartier (2002) It provides changes in schedule, site and cost estimation.
- BPG# 778. Arrangement Relating to Aeromedical Evacuation Implementing the MOU between the Department of Defense of the U.S.A. and the Department of National Defence of Canada concerning Mutual Support (1998) It promotes the common defense of the participants and provides mutual support for combined operations as well as to promote interoperability by providing the framework within which USTRANSCOM will provide aeromedical evacuation (AE) support to Canadian Forces (CF) and authorized beneficiaries, and the CF will provide AE support to U.S. forces and authorized beneficiaries.
- BPG# 779. MOU between the Department of Defense of the U.S.A. and the Department of National Defence of Canada on the Integrated Lines of Communication (ILOC) Operational Liaison Officer (2004) It describes the requirements for the assignment of a member of the Canadian Forces as the ILOC Operational Liaison Officer to the Logistics Directorate of the Joint Staff to establish formal liaison between the participants.
- BPG# 781. MOU between U.S. Department of the Army and the Department of National Defence of Canada concerning Liaison Officers (LO) (2001) It establishes provisions for a formal liaison between the participants concerning mutual cooperation, interoperability, and sharing of information, whereby the LO represents the parent to the host participant.
- BPG# 782. MOU between U.S. Joint Forces Command and the Department of National Defence of Canada regarding Liaison Officers (2003) It establishes provisions for a formal liaison between the participants to include scope, duties, activities, finances, security, administrative and technical matters, discipline and removal.
- BPG# 784. Annex to the Master Data Exchange Arrangement for the Mutual Development of Weapon Systems between the Department of Defense of the U.S.A. and the Department of National Defence of Canada on Vetrionics & Crew System Technologies (2002) It provides for the exchange of research, development, test and evaluation information in electronics integration architectures, crew systems research and simulation technologies and support information up to “secret” levels.
- BPG# 785. Chemical, Biological and Radiological Project Arrangement between the Department of Defense of the U.S.A. and the Department of National Defence of Canada concerning Smallpox (SP) Vaccine System Development Program (2002) It covers a scope of work related to the integration of national requirements into the SP Vaccine System advanced development program, development and licensed activities and training materials.
- BPG# 786. MOU among U.S. Department of Defense, Canada Department of National Defence and U.K. Concerning Trilateral Technology Research & Development Projects (TTRDP) (1998) It defines and establishes the general principles which will apply to the initiation, conduct and management of projects established by the separate TTRDP project arrangements. It encompasses collaboration on research, exploratory development, and advanced development of technologies for development of conventional weapon systems.

- BPG# 787. Space-Based Surveillance System Concept Studies, Experiments and Trials Project Arrangement Pursuant to CA-U.S-U.K. Technology Research and Development Project MOU Among Department of Defense of the U.S.A., the Department of National Defence of Canada and U.K. (1998) It develops and characterizes possible system concepts for Space-Based Surveillance Systems.
- BPG# 788. Arrangement between U.S. Department of Defense and Canada Department of National Defence on Reciprocal Use of Test Facilities Project Arrangement on the 25mm Gun Muffler Service Life (2003) It provides objectives and scope of work on the test and evaluation of a muffler for the 25 mm gun.
- BPG# 789. Amendment One to the Project Arrangement between the Department of Defense of the U.S.A. and the Department of National Defence of Canada for Combat Archer Evaluation on the CF-18 System Effectiveness Monitoring Program. (2004) It amends the project arrangement scope of work and cost estimate.
- BPG# 791. Annex to the Master Data Exchange Arrangement for the Mutual Development of Weapons Systems between the Department of Defense of the U.S.A. and the Department of National Defence of Canada on Defensive Aids Suites Technologies for Ground Combat Vehicle Systems (GCVS) (2002) It provides for the reciprocal exchange of Studies, Modeling and Simulation, and Assessments, Laboratory and Field trials, and research and development, and conceptual designs supporting technologies for GCVS.
- BPG# 793. MOU Between U.S. Army and the Department of National Defence of Canada regarding the Assignment of Canadian Forces (CF) Officer as a Visiting Faculty Instructor at the U.S. Army War College (2003) It establishes provisions for the assignment of a CF Officer as a visiting faculty instructor of the U.S. Army War College to include scope, activities, qualifications, status, and administrative arrangements.
- BPG# 794. Reciprocal Use of Test Facilities Project Arrangement between the Department of Defense of the U.S.A. and the Department of National Defence (DND) of Canada concerning Ballistic Firing and Testing of Small Arms Ammunition (SAA) or Related Equipment at the Lake City Army Ammunition Plant. (2004) It ensures that SAA procured by DND for military operational purposes meets the standards detailed in the NATO Standardization Agreements.
- BPG# 795. Reciprocal Use of Test Facilities Project Arrangement between the Department of Defense of the U.S.A. and the Department of National Defence of Canada concerning V-22 In-Flight Icing Survey (2003) It covers T&E objectives and scope of work for the Icing Protection System on V-22 aircraft as part of a continuing developmental program.
- BPG# 796. Reciprocal Use of Test Facilities Project Arrangement between the Department of Defense of the U.S.A. and the Department of National Defence of Canada concerning the CANUS Multi-Channel Tactical Digital Gateway (MTDG) Cryptographic Interoperability Testing at CECOM (2004) It covers T&E objectives and scope of work for the interoperability of CANUS telephony communications via MTDG link and to gather and analyze data to identify required modifications.
- BPG# 797. Information Exchange Annex to ABCANZ Multilateral Master Military Information Exchange MOU concerning Tactics, Techniques and Procedures for Unmanned Aerial Vehicles (UAV) Operations in Joint Time Sensitive Operations (2003) It establishes a framework for the exchange of nonproprietary operational information concerning UAV in joint and combined tactical operations.
- BPG# 798. Reciprocal Use of Test Facilities Project Arrangement Between the Department of Defense of the U.S.A. and the Department of National Defence of Canada concerning CC-130 Defensive Electronic Warfare Suites (DEWS) at the U.S. Naval Warfare Center (2004) It determines the effectiveness and performance of the CC-130 DEWS systems in a test flight environment and to fly against radio frequency emitters.

- BPG# 799. CANUS TRDPP Arrangement between the Department of Defense of the U.S.A. and the Department of National Defence of Canada concerning Information Exchange/Concept Demonstrator for Integration of Canadian Space Surveillance Data into the U.S. Space Surveillance Network (2003) Is sets out the guidelines for sharing of information of the development of sensors for surveillance of space and development of CONOPS.
- BPG# 805. Implementing Arrangement (IA) for The Mutual Use of Logistic Support and Services Concerning Reciprocal Port Services between the Department of Defense of the U.S.A. and the Department of National Defence of Canada concerning Reciprocal Port Services (Atlantic) (1996) This is an IA under the MOU concerning Mutual Support that was dated 30 December 1994. It designates the participants, list detailed support requirements, provide guidance on agreed upon ordering and billeting formats, and establish the procedures for the provision of mutual logistic support between the Atlantic Fleets of Canada and the U.S.
- BPG# 806. Implementing Arrangement concerning Services Provided By Defense Transportation Tracking System under the MOU between the Department of Defense (DOD) of the U.S.A. and the Department of National Defence (DND) of Canada concerning Mutual Support (1998) It delineates objectives, scope and responsibilities concerning services for surveillance tracking and monitoring of the DND of Canada's shipments of Sensitive Conventional Arms, Ammunitions and Explosives and other (non-ordnance) sensitive material by the DOD.
- BPG# 807. Implementing Arrangement Concerning The Provision of Critical Spares Support for USMC LAV 25 and Canadian Wheeled LAV Fleets between the Department of Defense of the U.S.A. and the Department of National Defence of Canada concerning Mutual Support (1998) It provides an emergency source of spares for either participant in support of operations, when shortages occur due to unforecasted operations.
- BPG# 823. Basic Standardization Agreement Among the Armies of U.S., U.K., Canada and Australia (1964) It ensures the fullest cooperation among the participants' Armies, to achieve the highest possible degree of interoperability through materiel and non-materiel standardization, and to obtain the greatest possible economy by the use of combined resources and effort.
- BPG# 824. Extension of the Data Exchange Annex on Space-Based Surveillance (SBS) pursuant to the Master Data Exchange Arrangement for the Mutual Development of Weapon Systems between the Department of Defense of the U.S.A. and the Department of National Defence of Canada (1998) It covers exchange of information on concepts, technologies, and experiments applicable to developing SBS to support the needs of NORAD, conducted on a reciprocal basis.
- BPG# 849. Letter of Understanding between the Department of Defense of the U.S.A. and the Department of National Defence of Canada on Deployment of Canadian Forces (CF) Assets with the U.S. Navy (2005) It memorializes formal planning and support for the integration of CF Naval Assets into deploying U.S. Naval Forces such as Carrier Strike Groups, Expeditionary Strike Groups and Surface Action Groups.
- BPG# 851. Administrative Arrangement between NORAD and Air Force Space Command (AFSC) regarding Support Provided to Canadian Forces (CF) Assigned to Peterson AFB or AF Space Command (2004) It establishes relationships and procedures between NORAD and the U.S. Air Force, for CF personnel: assigned to NORAD performing duties at an AFSPC installation or assigned to AFSPC unit; or assigned to the Canadian Forces Support Unit – Colorado Springs resident at Peterson Air Force Base.

APPENDIX H: ACRONYMS

A	
ABCANZ	American, British, Canadian, Australian and New Zealand
ALMR	Alaskan Land Mobile Radio
B	
BDD	Basic Defense Document
BDL	Bi-National Document Library
BPG	Bi-National Planning Group
BSD	Basic Security Document
C	
C4	Command, Control, Communications, and Computer
C4A	Command, Control, Communications, and Computer Architecture
Canada COM	Canada Command
Canada COM JCC	Canada Command Joint Command Centre
CANUS	Canada and the United States
CAP	Civil Assistance Plan
CBRNE	Chemical, biological, radiological, nuclear and high yield-explosive
CBSA	Canada Border Service Agency
CCEB	Combined Communications Electronic Board
CCG	Canadian Coast Guard
CDA	Canadian Defence Academy
CDP	Combined Defense Plan
CDS	Chief of the Defence Staff
CDSA	Comprehensive Defense and Security Agreement
CEO	Canada Eyes Only
CF OPP	Canadian Forces Operational Planning Process
CFCS	Canadian Forces' Command and Control System
CI/LE	Counter Intelligence/Intelligence/Law Enforcement
CI/LE	Counter-Intelligence/Law Enforcement
CIA	Central Intelligence Agency
CIFC	Combined Intelligence and Fusion Center
CIP	Critical Infrastructure Protection
CJCS	Chairman of the Joint Chiefs of Staff
CJM3IEM	Combined and Joint Multilateral Master Military Information Exchange MOU
CJMETL	Combined and Joint Mission Essential Task List
CJTF	Combined-Joint Task Force
CJTL	Canadian Joint Task List
CMIP	Combined Military Interoperability Plan
COI	Community of Interest
CONOPS	Concept of Operations
CONPLAN	Concept Plan
COP	Common Operational Picture
CPG	Contingency Planning Guidance
CSE	Communications Security Establishment
CSIS	Canadian Security Intelligence Service

C	
CTF	Combined Task Force
CTO	Collective Training Objectives
CWAN WG	Combined Wide Area Network Working Group
D	
DARPA	Defense Advanced Research Projects Agency
DCDS	Deputy Chief of the Defence Staff
DHS	Department of Homeland Security
DIN	Defense Information Network
DIO	Defensive Information Operations
DND	Department of National Defence
DOD	Department of Defense
DOE	Department of Energy
DOJ	Department of Justice
DOS	Department of State
DOT	Department of Treasury
DSCA	Defense Support of Civil Authorities
DTEP	Directorate of Training and Education Policy
DWAN	Defence Wide Area Network
E	
EBO	Effects-Based Operations
F	
FAC	Foreign Affairs Canada
FBI	Federal Bureau of Investigation
FEMA	Federal Emergency Management Agency
FMS	Foreign Military Sales
G	
GDP	Gross Domestic Product
GLSSS	Great Lakes and Saint Lawrence Seaway System
GOC	Government of Canada
GRIFFIN	GRIFFIN is the name of a network bridge
GWOT	Global War on Terror
H	
HLD	Homeland Defense
HLS	Homeland Security
HSDEC	Homeland Security / Defense Education Consortium
I	
IC	Intelligence Community
IEA	Information Exchange Annex
IEB	Information Exchange Broker
IEP	Information Exchange Process
IMS	International Military Student
IMSWG	Interdepartmental Marine Security Working Group
IPS	International Policy Statement
IPS-D	International Policy Statement on Defense

J

JCWS	Joint and Combined Warfighting School
JDA	Joint Duty Assignment
JFSC	Joint Forces Staff College
JIOC	Joint Intelligence Operations Center
JOC	Joint Operations Center
JOPES	U.S. Joint Operation Planning and Execution System
JPME	Joint Professional Military Education
JSCP	Joint Strategic Capabilities Plan
JSO	Joint Specialty Officer
JTF	Joint Task Force

L

LANDOP	Land Operations Plan
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M

MAREASTOP	Maritime East Operations Plan
MARWESTOP	Maritime West Operations Plan
MCC	Military Cooperation Committee
MCC IOWG	Military Cooperation Committee Information Operations Working Group
MDA	Maritime Domain Awareness
MERS	Mobile Emergency Response Centers
MIFC LANT	Maritime Intelligence Fusion Center Atlantic
MIFC PAC	Maritime Intelligence Fusion Center Pacific
MNIS	Multi-National Information Sharing
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
MSOC	Marine Security Operations Centres

N

NAFTA	North American Free Trade Agreement
NATO	North Atlantic Treaty Organization
NC JOC	Northern Command Joint Operations Center
N-NC JOC	NORAD-Northern Command Joint Operations Center
NCO	Network-Centric Operations
NCW	Network-Centric Warfare
NDCC	National Defence Command Centre
NDHQ	National Defence Headquarters
NDS	National Defense Strategy
NDU	National Defense University
NEC	Networked Enabled Capability
NGA	National Geospatial-Intelligence Agency
NIPRNET	Non-secure Internet Protocol Router Network
NMIC	National Maritime Intelligence Center
NMS	National Military Strategy
NNEC	NATO Network-Centric Capability
NOFORN	Not Releasable to Foreign Nationals
NORAD	North American Aerospace Defense
NRO	National Reconnaissance Office

N	
NSA	National Security Agency
NSHS	National Strategy for Homeland Security
NSP	National Security Policy (Canadian)
NSS	National Security Strategy (U.S.)
O	
OIF	Operation Iraqi Freedom
P	
PJBD	Permanent Joint Board on Defense
PSEPC	Public Safety and Emergency Preparedness Canada
R	
RCMP	Royal Canadian Mounted Police
RELCANUS	Releasable to Canada and the United States
S	
SCG	Security Cooperation Guidance
SCJTF	Standing Combined Joint Task Force
SCONSAD	Standing Senate Committee on National Security and Defence
SCTP	Strategic Collective Training Plan
SIPRNET	Secure Internet Protocol Router Network
SJS	Strategic Joint Staff (Canada)
SOFA	Status of Forces Agreement
SPP	Security and Prosperity Partnership of North America
T	
TITAN	Classified Canadian Forces Command System
TOR	Terms of Reference
TSC	Theater Security Cooperation
TTP	Tactics, Techniques, and Procedures
TTX	Table Top Exercise
U	
UCP	Unified Command Plan
UHF	Ultra High Frequency
UJTL	Universal Joint Task List
USCG	U.S. Coast Guard
USG	United States Government
V	
VHF	Very High Frequency
W	
WMD-CST	Weapons of Mass Destruction Civil Support Teams
WMD	Weapons of Mass Destruction

APPENDIX I: MEMBERS OF THE BI-NATIONAL PLANNING GROUP

Senior Leadership

Lieutenant-General Eric A. Findley, Canadian Forces, North American Aerospace Defense Command
Lieutenant General Joseph R. Inge, U.S. Army, United States Northern Command

Co-Directors

Captain (N) Richard Bergeron, Canadian Forces
Captain Kendall Card, United States Navy

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Lieutenant-Colonel Douglas Fairley
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Lieutenant-Commander Vincent Bambury
Lieutenant-Commander Grant Bannister
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Mrs. Rose Ulrich-Hare, NORTHROP-GRUMMAN
Mr. Robert M. Smith, BAH

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Former Senior Leadership

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Lieutenant-General Kenneth R. Pennie, Canadian Forces

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Colonel Lauri K. Cross, USAF

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Captain Kim Nelson

Sergeant Manon Plante

Master Corporal Paul Carver

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Ms. Tina Crouse

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Ms. Ursula Woodman

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